Service Manual

VL3500™ & VL3500™ Q Spot Luminaires

02.9678.0018

PHILIPS

VARI*LITE

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VARI✳LITE® products are protected by one or more of the following patents, and other pending patent applications worldwide:

U. S. Patents No. 6,809,869; 6,796,682; 6,769,792; 6,578,987; 6,550,939; 6,282,027; 6,123,436; 6,113,252; 6,046,861; 6,031,749; 6,011,640; 5,969,868; 5,959,768; 5,934,794; 5,882,107; 5,829,868; 5,825,548; 5,798,619; 5,774,273; 5,769,527; 5,758,956; 5,728,994; 5,640,061; 5,590,954; 5,454,477; 5,432,691; 5,367,444; 5,329,431; 5,307,295; 5,282,121; 5,278,742; 5,209,560; 5,186,536; 5,073,847; 5,010,459; 4,980,806; 4,972,306; 4,800,474; 4,779,176; 4,701,833; 4,602,321;

U. S. Design Patents No. 524,245; 457,678; 452,339; 451,890; 442,944; 439,356; 420,332; 417,300; 415,301; 414,888; 413,995; 377,338; 366,712; 359,574; 350,408; 347,113;

Australia Patents No. 693,691; 683,695; 667,109; 649,264; 646,588; 586,095; 576,400;

Australia Design Patents No. 128,796; 128,795;

Canada Patents No. 2,070,670; 2,050,375; 1,270,675; 1,259,058;

Canada Design Patents No. 81,234; 81,233; 76,046;

European (UK) Patents No. 0 652 400; 0 586 049; 0 565 218; 0 547 732; 0 534 710; 0 495 305; 0 474 202; 0 379 970; 0 253 082; 0 253 081; 0 248 974; 0 192 882;

Germany Patents No. 694 25 943.8; 693 14 122.0; 692 08 615.3; 692 07 692.1; 691 31 478.0; 691 21 029.2; 690 33 385.4; 37 89 166.9; 37 68 727.1; 37 51 804.6; 37 50 201.8; 35 87 270.5;

Germany Design Patents No. M 98 01 745.4; M 96 04 515.9; M 96 04 514.0; M 94 07 689.8; M 94 02 951.2; M 499 03 583.6; M 498 11 203.9; G 93 12 884.3;

Spain Patents No. 2 090 191; 2 084 289; 2 020 960; 0 548 328;

Spain Utility Model Patent No. 2.031.748;

Spain Design Patents No. 0.137.502; 0.137.501; 0.133.573;

Greece Patent No. 910.400.544;

Japan Patents No. 2,843,696; 2,059,669; 2,055,324; 2,002,168; 1,966,525; 1,889,481; 1,792,721; 1,770,241;

Japan Design Patents No. 985,985-1; 985,985; 947,552; 945,436-1; 945,436; 1,106,089; 1,077,598; 1,072,598; 1,060,414; 1,002,123;

Korea Patents No. 76,310; 42,639; 283,770; 181,180;

Korea Design Patents No. 209,896; 209,895;

Mexico Patent No. 180,148;

Taiwan Patents No. 78,726; 66,975; 65,380; 28,275;

United Kingdom Design Registrations No. 2082526; 2072562; 2056387; 2056386; 2042174; 2038212; 2033108; 2029499.

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VL3500™ & VL3500™Q Spot Luminaire Service Manual

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How To Obtain Warranty Service

A copy of the Vari-Lite Limited Warranty was included in the shipping package for this VARI✳LITE® product.

To obtain warranty service, please contact customer service at 1-877-VARI-LITE (1-877-827-4548), +1-214-647-7880, or customerservice@genlytecontrols.com and request a Return Material Authorization (RMA) for warranty service. You will need to provide the model and serial number of the item being returned, a description of the problem or failure and the name of the registered user or organization. If available, you should have your sales invoice to establish the date of sale as the beginning of the warranty period.

Once you obtain the RMA, pack the unit in a secure shipping container or in its original packing box. Fill out the RMA form included at the end of this manual and place in shipping container along with a copy of your invoice (if available). Write the RMA number legibly on or near the shipping address label and return the unit, freight prepaid to:

Vari-Lite
10911 Petal Street
Dallas, Texas 75238 USA
Attention: Warranty Service

As stated in the warranty, it is required that the shipment be insured and FOB our service center.

Note: The Series 3500 Luminaires share many common assemblies and parts of the VARI✳LITE® Series 3000 Luminaires.

Compliance Notice

FCC This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when this equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with Vari-Lite system, service, and safety guidelines, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his/her own expense.

CE

Declaration of Conformity

We declare, under our sole responsibility, that this product complies with the relevant clauses of the following standards and harmonized documents:

Safety

EN 60598-1:2000 Luminaire Safety Standard, General Requirements
EN 60598-2 17:1989/A2: 1991 Specification for Luminaires for Stage and Studio Lighting

EMC

EN 61000-6-4: 2001 Radiated and Conducted Emissions

We certify that the product conforms to the protection requirements of council directives: 73/23/EEC (LVD) and 89/336/EEC (EMC)

Safety Notice

It is extremely important to read ALL safety information and instructions provided in this manual and any accompanying documentation before installing and operating the products described herein. Heed all cautions and warnings during installation and use of this product.

Safety symbols used throughout this manual are as follows:

CAUTION advising of potential damage to product.

WARNING advising of potential injury or death to persons.

GENERAL INFORMATION PERTAINING TO PROTECTION AGAINST ELECTRICAL SHOCK, FIRE, EXPOSURE TO EXCESSIVE UV RADIATION, AND INJURY TO PERSONS CAN BE FOUND BELOW.

WARNING:
INSTRUCTIONS FOR CONTINUED PROTECTION AGAINST FIRE

1. VARI✻LITE® luminaires have been designed for use with specific lamp types. The VL3500 Spot luminaires require an Osram HMI 1200 W/S metal halide lamp. Installing another type of lamp may be hazardous.
2. Luminaires may be mounted on any type of surface as long as mounting instructions are followed. See instructions detailed in this manual.
3. Note distance requirement from combustible materials or illuminated objects for VARI✻LITE® luminaires.

WARNING:
INSTRUCTIONS FOR CONTINUED PROTECTION AGAINST ELECTRICAL SHOCK

1. VARI✻LITE® luminaires are designed for dry locations only. Exposure to rain or moisture may damage luminaire.
2. Disconnect power before servicing any VARI✻LITE® equipment.
3. Servicing to be performed by qualified personnel only.

WARNING:
INSTRUCTIONS FOR CONTINUED PROTECTION AGAINST EXCESSIVE EXPOSURE TO UV RADIATION

1. Many VARI✻LITE® luminaires use a lamp that produces UV radiation. DO NOT look directly at lamp.
2. It is hazardous to operate luminaires without lens or shield. Shields, lenses, or ultraviolet screens shall be changed if they have become visibly damaged to such an extent that their effectiveness is impaired. For example, by cracks or deep scratches.

WARNING:
INSTRUCTIONS FOR PROTECTION AGAINST INJURY TO PERSONS

1. Exterior surfaces of the luminaire will be hot during operation. Use appropriate safety equipment (gloves, eye protection, etc.) when handling and adjusting hot equipment and components.
2. Luminaires will have a hot lamp when operating. Disconnect power and allow lamp to cool before replacing.
3. Arc lamps emit ultraviolet radiation which can cause serious skin burn and eye inflammation. Additionally, arc lamps operate under high pressure at very high temperatures. Should the lamp break, there can exist a danger of personal injury and/or fire from broken lamp particles being discharged.
4. Wear eye protection when relamping.
5. Appropriate safety equipment (gloves, eye protection) should be used when handling damaged lamps.
6. If lamp is touched with bare hands, clean lamp with denatured alcohol and wipe with lint-free cloth before installing or powering up the luminaire.
7. The lamp shall be changed if it has become damaged or thermally deformed.

WARNING:
RF INTERFERENCE

1. This is a Class A product. In a domestic environment this product may cause radio interference, in which case, the user may be required to take adequate measures.

ARC LAMP CHARACTERISTIC CONSIDERATIONS

1. Arc lamps require a period of time to relight after a power interruption or a severe voltage dip. In some cases, the lamp will automatically relight after it has cooled depending on Lamp Power-Up State configuration setting.
2. Burning position is universal.

Sicherheitshinweise

Es ist äußerst wichtig, ALLE Sicherheitsinformationen und -hinweise in diesem Handbuch und dem beiliegenden Informationsmaterial zu lesen, bevor Sie die hierin beschriebenen Produkte installieren bzw. bedienen. Halten Sie bei der Installation und dem Einsatz dieses Produkts alle Warnhinweise und Vorsichtsmaßnahmen ein.

Folgende Sicherheitssymbole werden in diesem Handbuch verwendet:

VORSICHT - weist auf möglichen Produktschaden hin.

WARNUNG - weist auf mögliche Körperverletzung und Lebensbedrohung hin.

NACHSTEHEND FINDEN SIE ALLGEMEINE HINWEISE ÜBER SICHERHEITSVORKEHRUNGEN GEGEN ELEKTROSCHOCK, FEUER, ÜBERHÖHTE UV-STRAHLUNG UND KÖRPERVERLETZUNGEN.

WARNUNG:
HINWEISE ZUM FEUERSCHUTZ

1. VARI✻LITE®-Scheinwerfer sind ausschließlich für den Einsatz mit bestimmten Lampentyps. Achten Sie auf den Lampentyp (Osram HMI 1200 W/S metal halide lamp), bevor Sie die jeweiligen Lampen ersetzen. Die Installation eines anderen Lampentyps kann gefährlich sein.
2. Scheinwerfer können auf jeder beliebigen Oberfläche montiert werden, solange Sie die Montageanweisungen befolgen. Detaillierte Hinweise finden Sie in diesem Handbuch.
3. Beachten Sie die Einhaltung des erforderlichen Sicherheitsabstandes der VARI✻LITE®-Scheinwerfer von brennbarem Material oder beleuchteten Objekten.

WARNUNG:
HINWEISE ZUM SCHUTZ GEGEN ELEKTROSCHOCK

1. VARI✻LITE®-Scheinwerfer eignen sich ausschließlich für trockene Standorte. Regen oder Feuchtigkeit können die Scheinwerfer beschädigen.
2. Unterbrechen Sie die Stromzufuhr, bevor Sie mit der Arbeit an VARI✻LITE®-Geräten beginnen.
3. Die Geräte sollten nur von qualifiziertem Personal gewartet werden.

WARNUNG:
HINWEISE ZUM SCHUTZ GEGEN ÜBERHÖHTE UV-STRAHLUNG

1. Viele VARI*LITE®-Scheinwerfer verwenden die Lampentyp, der UV-Strahlen abgibt. SCHAUEN SIE NICHT direkt in die Lampe.
2. Es ist gefährlich, Leuchten ohne Linsen oder Blenden zu bedienen. Blenden, Linsen oder Ultraviolettschirme müssen ausgetauscht werden, sofern deren Schutzwirkung durch sichtbare Beschädigung (z. B. Sprünge oder Schrammen) eingeschränkt ist.

WARNUNG:
HINWEISE ZUM SCHUTZ GEGEN KÖRPERVERLETZUNGEN

1. Bei Betrieb sind die Außenflächen der Scheinwerfer heiß. Verwenden Sie bei der Bedienung von aufgeheizter Apparatur die jeweils geeignete Sicherheitsausrüstung (Handschuhe, Augenschutz etc.).
2. Bei Betrieb der Scheinwerfer ist die Lampe heiß. Unterbrechen Sie die Stromzufuhr und lassen Sie die Lampe abkühlen, wenn Sie diese austauschen.
3. Bogenlampen senden ultraviolette Strahlen aus, die Hautverbrennungen und Augenentzündungen verursachen können. Der Betrieb von Bogenlampen erfolgt unter Hochdruck und bei hohen Temperaturen. Sollte die Lampe zerbrechen, besteht die Gefahr von Körperverletzung bzw. von Feuer, das von Lampenteilen ausgelöst werden kann.
4. Tragen Sie beim Austausch der Lampen einen Augenschutz.
5. Die geeignete Sicherheitsausrüstung (Handschuhe, Augenschutz) sollte beim Umgang mit beschädigten Lampen verwendet werden.
6. Wenn die Lampe mit bloßen Händen berührt wird, reinigen Sie sie mit denaturiertem Alkohol und einem flusenfreien Tuch, bevor Sie die Scheinwerfer installieren oder in Betrieb nehmen.
7. Wenn die Lampe beschädigt oder durch Hitzeeinwirkung deformiert ist, muß diese ausgetauscht werden.

WARNUNG:
HF-INTERFERENZ

1. Es handelt sich um ein Produkt der Klasse A. In einer Wohnumgebung kann das Produkt Hochfrequenzstörungen verursachen. In diesem Fall müssen eventuell geeignete Maßnahmen getroffen werden.

BESONDERHEITEN VON BOGENLAMPEN

1. Bogenlampen benötigen eine gewisse Zeitdauer, um nach einem Stromausfall oder einem Spannungsgefälle wieder aufzuleuchten. In einigen Fällen wird die Lampe nach Abkühlung automatisch wieder aufleuchten, je nach der Systemkonfigurationseinstellung des Lampeneinschaltungsstatus.
2. Die Brennposition ist Universal.

Notes de sécurité

Avant de procéder à l'installation des produits décrits dans ce guide et de les mettre en marche, il est extrêmement important de lire TOUS les renseignements et TOUTES les directives de sécurité contenues dans ce guide ainsi que toute documentation jointe. Tenir compte de tous les avertissements et suivre toutes les précautions pendant l'installation et l'utilisation de cet appareil.

Les symboles de sécurité utilisés dans ce guide sont les suivants :

ATTENTION Ce symbole annonce que l'appareil risque d'être endommagé.

AVERTISSEMENT Ce symbole annonce qu'il y a risque d'accident grave ou même fatal.

CETTE SECTION CONTIENT DES INFORMATIONS GÉNÉRALES POUR SE PROTÉGER CONTRE LES DÉCHARGES ÉLECTRIQUES , LES INCENDIES, L'EXPOSITION EXCESSIVE AUX RAYONS UV ET TOUT AUTRE ACCIDENT POUVANT ENTRAÎNER DES BLESSURES.

AVERTISSEMENT:
DIRECTIVES POUR SE PROTÉGER CONTRE LES INCENDIES

1. Les luminaires VARI✻LITE® ont été conçus pour être utilisés uniquement avec certaines type de lampes. Vérifier le type de lampe (Osram HMI 1200 W/S metal halide lamp) avant de remplacer les lampes. L'installation d'un autre type de lampe peut poser un danger.
2. Les luminaires peuvent être fixés sur tout type de surface tant que les directives de montage sont respectées. Voir les explications détaillées dans ce guide.
3. Vérifier la distance à respecter entre les matériaux combustibles ou les objets illuminés et les luminaires VARI✻LITE®.

AVERTISSEMENT:
DIRECTIVES POUR SE PROTÉGER CONTRE LES DÉCHARGES ÉLECTRIQUES

1. Les luminaires VARI✻LITE® sont conçus pour une utilisation au sec uniquement. Une exposition à la pluie et à l'humidité risque d'endommager le luminaire.
2. Débrancher l'appareil avant de procéder à la révision de tout matériel VARI✻LITE®.
3. Les révisions doivent être effectuées uniquement par des personnes qualifiées.

AVERTISSEMENT:
DIRECTIVES POUR SE PROTÉGER CONTRE UNE EXPOSITION EXCESSIVE AUX RAYONS UV

1. Plusieurs luminaires VARI✻LITE® utilisent une lampe qui produit des rayons UV. NE PAS fixer son regard sur la lampe.
2. L'utilisation des luminaires sans lentille ou blindage pose des risques. Tous blindages, lentilles ou écrans ultraviolet visiblement endommagés au point que leur efficacité en est affectée doivent être remplacés, par exemple s'il y a des fissures ou de profondes rayures.

AVERTISSEMENT:
DIRECTIVES POUR SE PROTÉGER CONTRE LES ACCIDENTS POUVANT ENTRAÎNER DES BLESSURES

1. Les surfaces externes du luminaire deviennent brûlantes quand l'appareil est en marche. Pour manœuvrer ou ajuster des appareils brûlants et leurs composants, se protéger suffisamment (gants, protection pour les yeux, etc.).
2. La lampe du luminaire est brûlante lorqu'il est en marche. Débrancher le courant et attendre que la lampe ait refroidi avant de la remplacer.
3. Les lampes à arc émettent des rayons ultraviolets pouvant causer de graves brûlures sur la peau et une inflammation des yeux. De plus, les lampes à arc fonctionnent sous haute tension à de très hautes températures. Si la lampe se casse, les particules de la lampe cassée peuvent causer blessures et/ou incendie en s'éparpillant.
4. Se protéger les yeux pour remplacer la lampe.
5. Utiliser des appareils de protection appropriés (gants, protection des yeux) pour manier des lampes endommagées.
6. Si la lampe a été touchée avec des mains nues, la nettoyer avec de l'alcool dénaturé et l'essuyer avec un chiffon non-pelucheux avant d'installer ou de brancher le luminaire.
7. Si la lampe a été endommagée ou a reçu une déformation thermique, elle doit être remplacée.

AVERTISSEMENT:
INTERFÉRENCE RF

1. Cet appareil est de Classe A. Dans un environnement domestique, cet appareil peut causer des interférences radio, et si c'est le cas, l'utilisateur peut avoir à prendre des mesures adéquates.

CONSIDÉRATIONS DES CARACTÉRISTIQUES DE LAMPES À ARC

1. Après une interruption de courant ou une baisse importante de voltage, les lampes à arc mettent du temps avant de se rallumer. Dans certains cas, la lampe se rallumera automatiquemet après s'être refroidie. Cela dépend de la manière dont le système est réglé pour le statut de mise en marche de la lampe.
2. La position Brûler est Universelle.

Aviso sobre Seguridad

Es muy importante leer TODA la información e instrucciones sobre seguridad que se indica en este manual así como en los documentos adjuntos antes de instalar y operar los productos descritos. Se debe prestar atención a todos los avisos y advertencias durante la instalación y uso de este producto.

Los símbolos de seguridad usados en este manual son los siguientes:

CUIDADO, indica posibles daños al producto.

ADVERTENCIA, indica posibles lesiones o muerte a las personas.

LA INFORMACIÓN GENERAL RELACIONADA A LA PROTECCIÓN CONTRAGOLPES DE CORRIENTE ELÉCTRICA, INCENDIO, EXPOSICIÓN EXCESIVA A RADIACIÓN ULTRA VIOLETA Y LESIONES A LAS PERSONAS SE PUEDE ENCONTRAR SEGUIDAMENTE:

ADVERTENCIA:
INSTRUCCIONES PARA PROTECCIÓN CONTINUA CONTRA INCENDIO

1. Las luminarias VARI✻LITE® han sido diseñadas para ser usadas solamente con algunas lámparas. Tome nota del tipo de lámpara (Osram HMI 1200 W/S metal halide lamp) antes de reemplazarla. Instalación de otro tipo de lámpara puede ser peligroso.
2. Las luminarias se pueden instalar en cualquier tipo de superficie siempre que se sigan las instrucciones de instalación. Vea las instrucciones detalladas en este manual.
3. Tome nota de los requerimientos de distancia de materiales combustibles u objetos iluminados para las luminarias VARI✻LITE®.

ADVERTENCIA:
INSTRUCCIONES PARA PROTECCIÓN CONTINUA CONTRA CHOQUE ELÉCTRICO

1. Las luminarias VARI✻LITE® están diseñadas solamente para lugares secos. La exposición a la lluvia o humedad pueden dañar la luminaria.
2. Desconecte la energía antes de dar servicio a cualquier equipo de VARI✻LITE®.
3. El servicio debe ser realizado solamente por personal calificado.

ADVERTENCIA:
INSTRUCCIONES PARA PROTECCIÓN CONTINUA CONTRA LA EXPOSICIÓN EXCESIVA DE RADIACIÓN ULTRA VIOLETA

1. Muchas luminarias VARI✻LITE® usan un tipo de lámpara que produce radiación UV. NO mire directamente a la lámpara.
2. Es peligroso operar luminarias sin lentes o protectores. Debe cambiar los protectores, lentes o pantallas ultravioletas si se aprecia que han sido dañadas, y que su efectividad pudiera estar deteriorada. Por ejemplo, si tuvieran rajaduras o raspaduras profundas.

ADVERTENCIA:
INSTRUCCIONES PARA PROTECCIÓN CONTRA LESIONES DE PERSONAS

1. Las superficies exteriores de las luminarias están calientes durante su operación. Use un equipo de seguridad apropiado (guantes, protección para los ojos, etc.) cuando haga ajustes en el equipo y componentes que están calientes.
2. Cuando las luminarias están en operación la lámpara estará muy caliente. Desconecte la energía y deje que la lámpara se enfríe antes de reemplazarla.
3. Las lámparas de arco emiten radiaciones ultravioletas que pueden ocasionar serias quemaduras a la piel e inflamación a los ojos. Además, las lámparas de arco operan a alta presión y muy alta temperatura. Si la lámpara se rompe, puede existir el peligro de lesiones al personal o un incendio ocasionado por las partículas de la lámpara rota que se caen.
4. Use protección para los ojos cuando vuelve a colocar una lámpara nueva.
5. Use un equipo de seguridad apropiado (guantes, protección para los ojos, etc.) cuando trabaje con lámparas dañadas.
6. Si toca la lámpara con las manos, limpie la lámpara con alcohol desnaturalizado y con tela sin pelusas antes de instalar o volver a conectar la luminaria.
7. Cambie la lámpara si está dañada o deformada termicamente.

ADVERTENCIA:
INTERFERENCIA RF

1. Este es un producto de Clase A. En el ambiente de la casa este producto puede ocasionar radiointerferencia, en cuyo caso, el usuario debe tomar las medidas adecuadas.

CONSIDERACIONES SOBRE LAS CARACTERÍSTICAS DE LA LÁMPARA DE ARCO

1. Las lámparas de arco requieren un período de tiempo para volver a iluminarse después de una interrupción de energía o de una severa caída de voltaje. En algunos casos, la lámpara se volverá a iluminar en forma automática después que se ha enfriado dependiendo de la configuración del sistema de energía de la lámpara.
2. La posición de encendido es universal.

安全性に関する注意事項

ここに記載されている製品を取り扱う場合は、まず本マニュアルおよび付属のマニュアルの安全性に関する情報と説明をすべてお読みください。また、実際に本製品を取り付けたり使用する際には、すべての注意事項および警告に留意して作業してください。

本マニュアルでは、以下の安全マークを使用しています。

注意：製品に損傷を与える危険性があります。

警告：人身事故につながる危険性があります。

感電、火災、UV 放射に対する過度の露出、および人身事故を防ぐための一般的な情報については、以下の説明をお読みください。

警告：
火災の発生を防ぐためのヒント

1. VARI*LITE® 照明器具は、ランプを使用するように設計されています。ランプを交換する際は、ランプの種類（など）を確認するようにしてください。他の種類のランプを取り付けると危険です。
2. 照明器具は、本マニュアルの指示に従って操作するかぎり、どのようなタイプの表面にでも取り付けることができます。詳細については、本マニュアルを参照してください。
3. ヒューズを交換する場合は、同じヒューズ（同じ種類、同じクラス）を使用してください。
4. VARI*LITE® 照明器具は、可燃性物質または他の光源から必要な距離だけ離して配置してください。

警告：
感電を防ぐためのヒント

1. VARI*LITE® 照明器具は、乾燥した環境で使用するように設計されています。雨で濡れる場所や湿気の多い場所に取り付けると、照明器具が傷むことがあります。
2. VARI*LITE® 照明器具を修理点検する場合は、必ず先に電源を切ってください。
3. 照明器具の修理点検は、資格を持つ技師のみが行うようにしてください。

警告：
過度の UV 放射にさらされないためのヒント

1. VARI*LITE® 照明器具の多くは、UV 放射を生ずる HID タイプのランプを使用しています。ランプを直視することは避けてください。
2. レンズまたはシールドを使わずに照明器具を点灯すると危険です。レンズ、シールド、紫外線画面は、ひび割れや深い引っかき傷などにより、その効力が損なわれるようになったら取り替えるようにします。

警告：
人身事故を防ぐためのヒント

1. 照明器具が点灯しているときは、その外側が熱くなります。熱くなった器具やコンポーネントを取り扱う際には、適切な防具（手袋や保護用眼鏡）を使用してください。
2. 照明器具が点灯しているときは、そのランプが熱くなります。ランプを交換する場合は、照明器具の電源を切り、ランプの温度が下がるまで待ってください。ランプの裏ぶたをあけると、遮断スイッチが働いて、ランプの電源が切れる場合があります。
3. アーク灯は紫外線を放射します。この紫外線によって、ひどい火傷を負ったり、目の炎症を起こすことがあります。さらに、アーク灯は、高圧高温の状態で光を発します。そのため、万一アーク灯が破損すると、飛び散った破片で人身事故や火災が発生する危険性があります。
4. 再点灯するときには、保護用眼鏡を着用してください。
5. 損傷したランプを取り扱う場合は、適切な防具（手袋や保護用眼鏡）を着用してください。
6. 手袋を着用せずに直接手でランプを触った場合は、変性アルコールを使ってランプをきれいにし、糸くずの出ない布で拭いてから照明器具を取り付け、電源を入れるようにします。
7. 傷がついたランプや熱によって変形したランプは取り替えてください。

警告：
RF 干渉

1. 本製品は Class A に分類されます。本製品は、家庭環境において無線干渉を起こす可能性があります。その場合、使用者は適切な処置を取らなければならないことがあります。

アーク灯の特性

1. 停電後または大きな電圧ディップ後にアーク灯を再点灯する場合は、しばらく時間をおくようにしてください。Lamp Power-Up State）システム設定によっては、温度が下がったときに自動的に再点灯される場合もあります。
2. アーク灯は点光源です。

CHAPTER 3.

Illustrated Parts Breakdown

This chapter contains illustrated parts breakdowns for all VL3500™ Spot Luminaire assemblies.

Note: The VL3500 Series Luminaires share many common assemblies and parts of the VARI*LITE® Series 3000 Luminaires.

- **Drawing Trees**
- **Top Assembly**
- **Head Assembly**
- **Yoke Assembly**
- **Head/Yoke PCB Assemblies**
- **Enclosure Assembly**
- **Cable Assemblies**

SERVICE

Drawing Trees

VL3500 Spot Luminaire

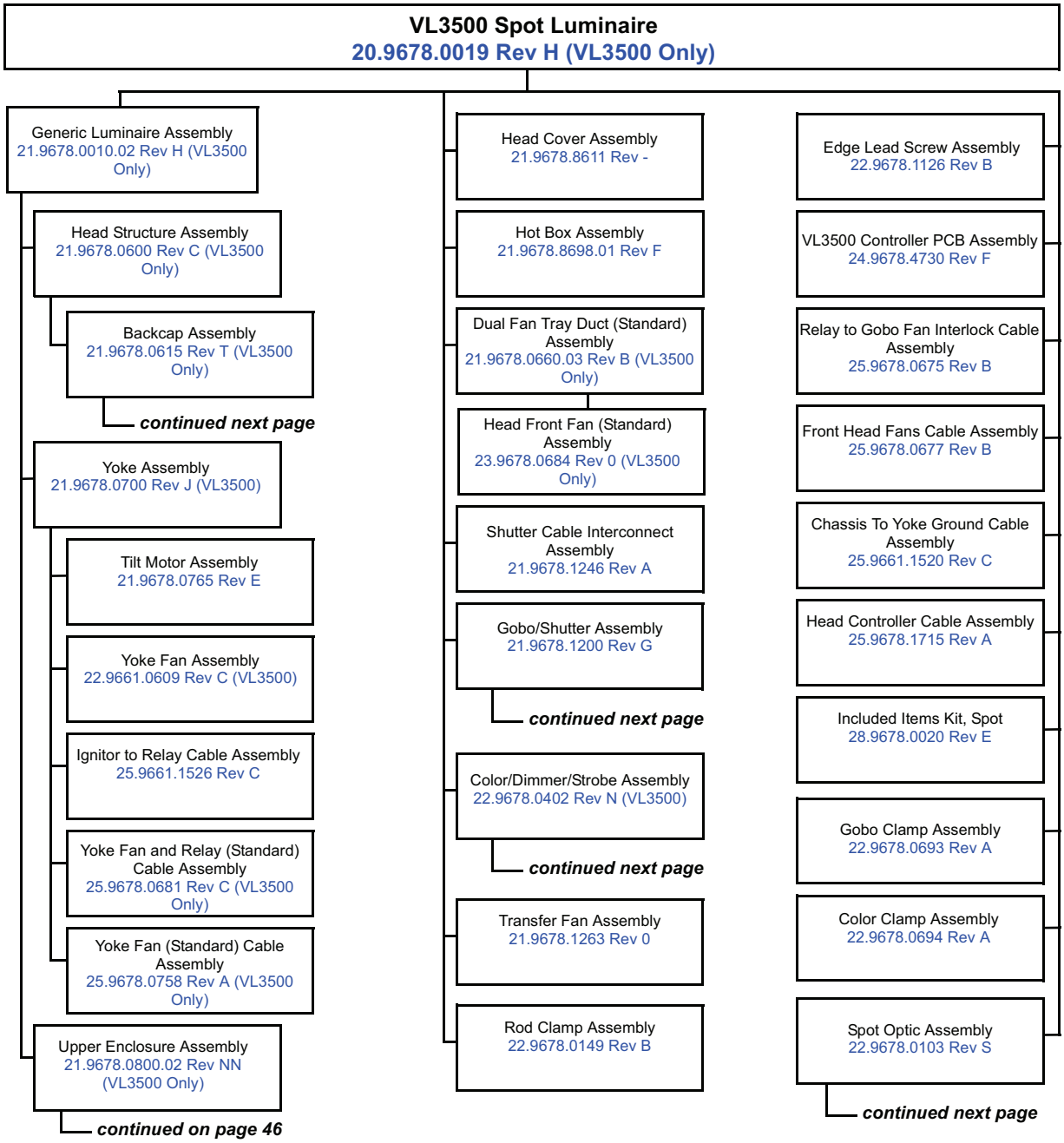


Figure 3-1: VL3500 Spot Luminaire Subassembly Drawing Tree Part 1

VL3500 Spot Luminaire (continued)

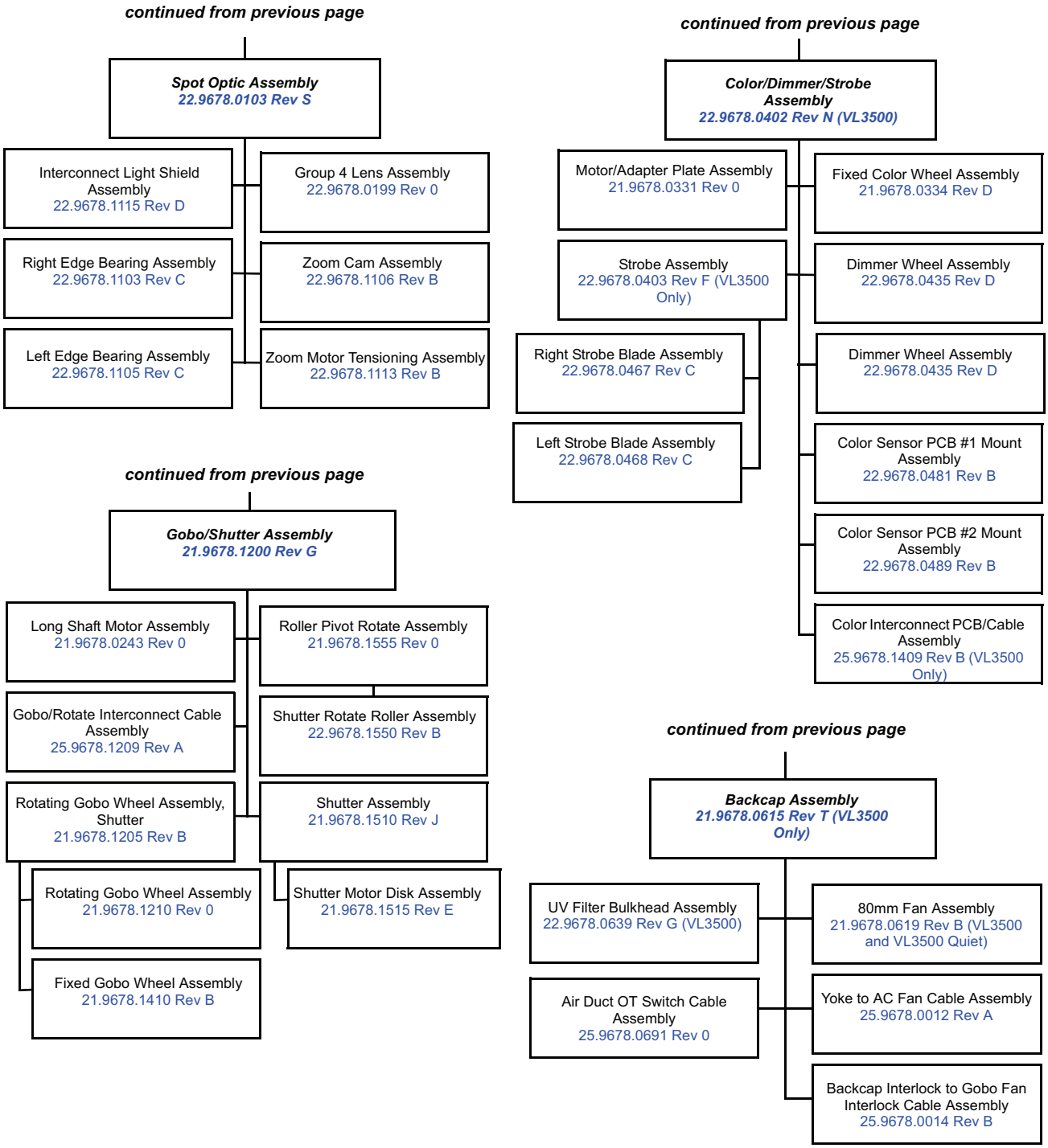


Figure 3-2: VL3500 Spot Luminaire Subassembly Drawing Tree Part 2

VL3500 Spot Luminaire (continued)

continued from page 44

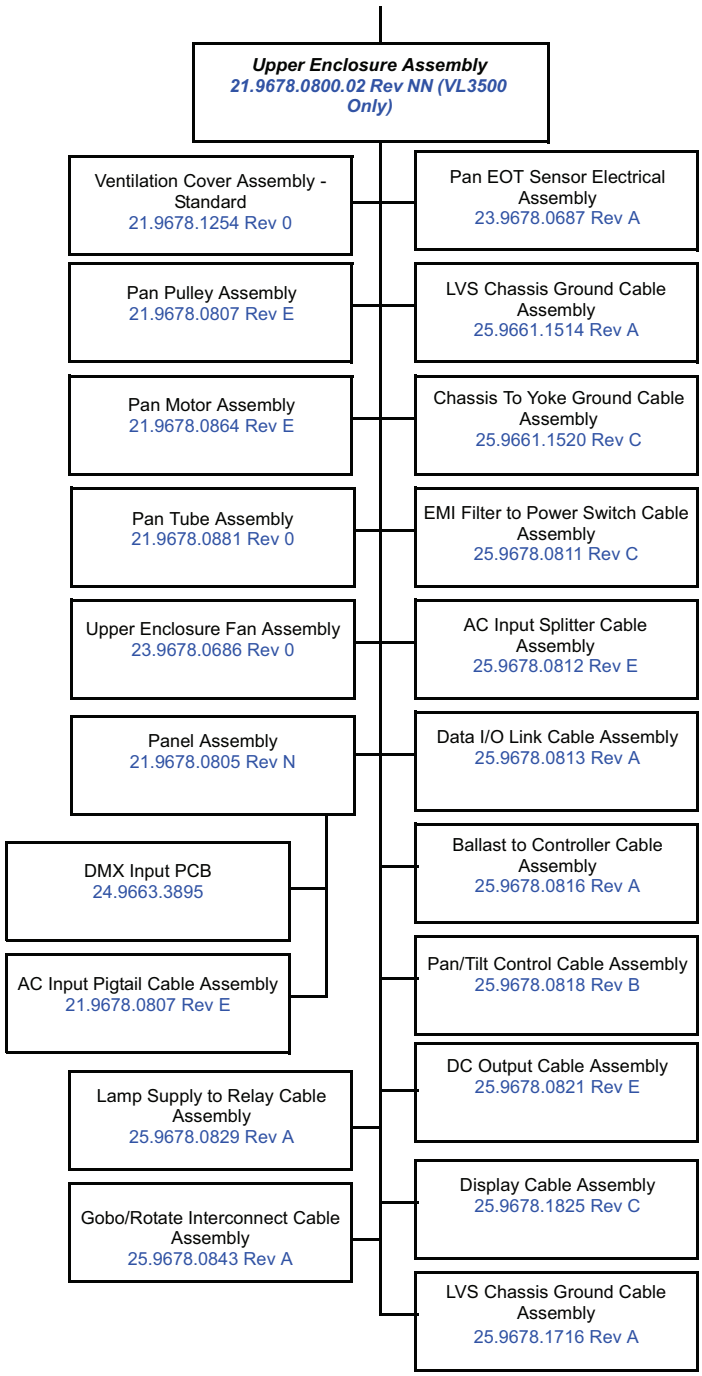


Figure 3-3: VL3500 Spot Luminaire Subassembly Drawing Tree Part 3

VL3500Q Spot Luminaire

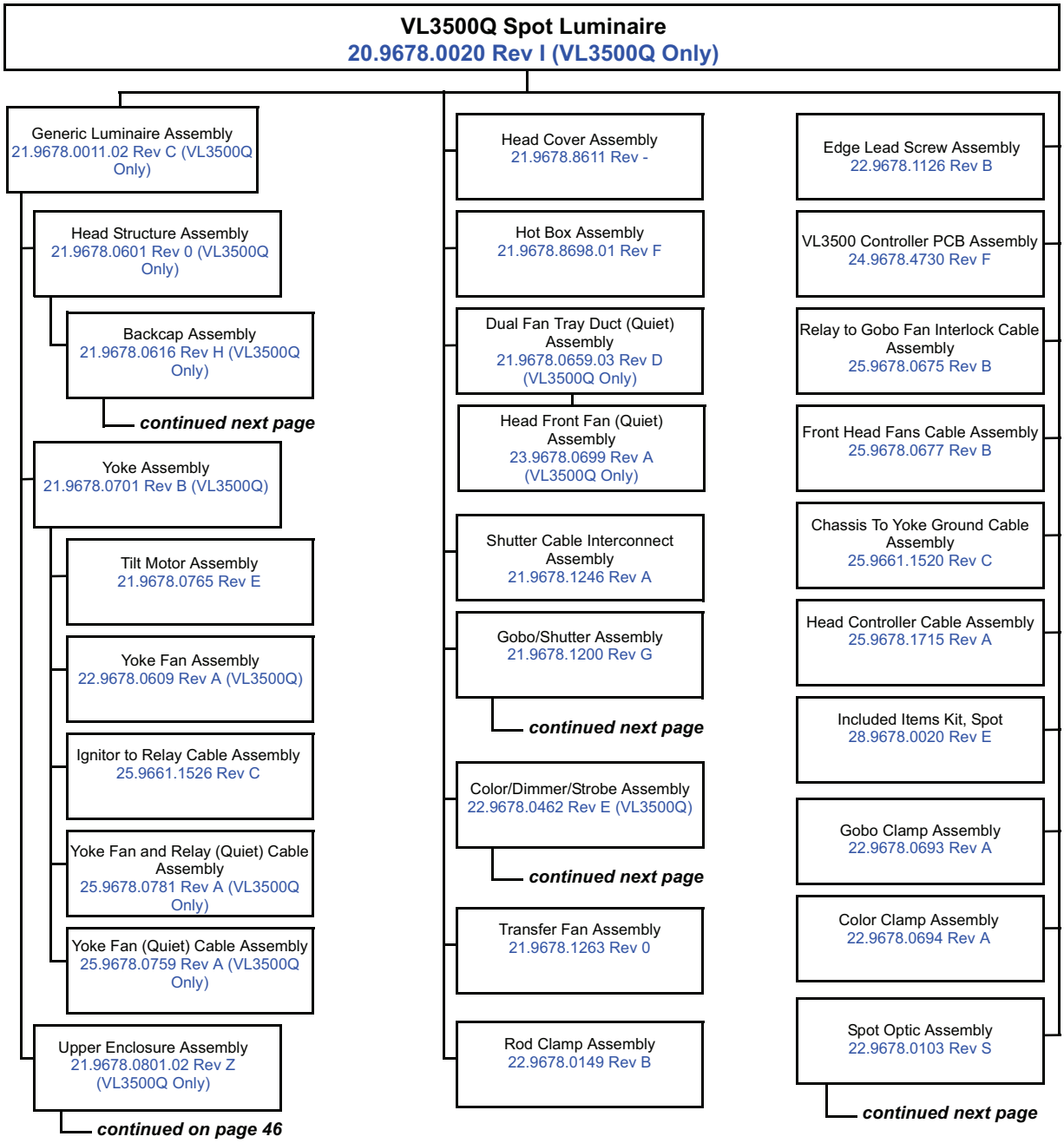


Figure 3-4: VL3500Q Spot Luminaire Subassembly Drawing Tree Part 1

VL3500Q Spot Luminaire (continued)

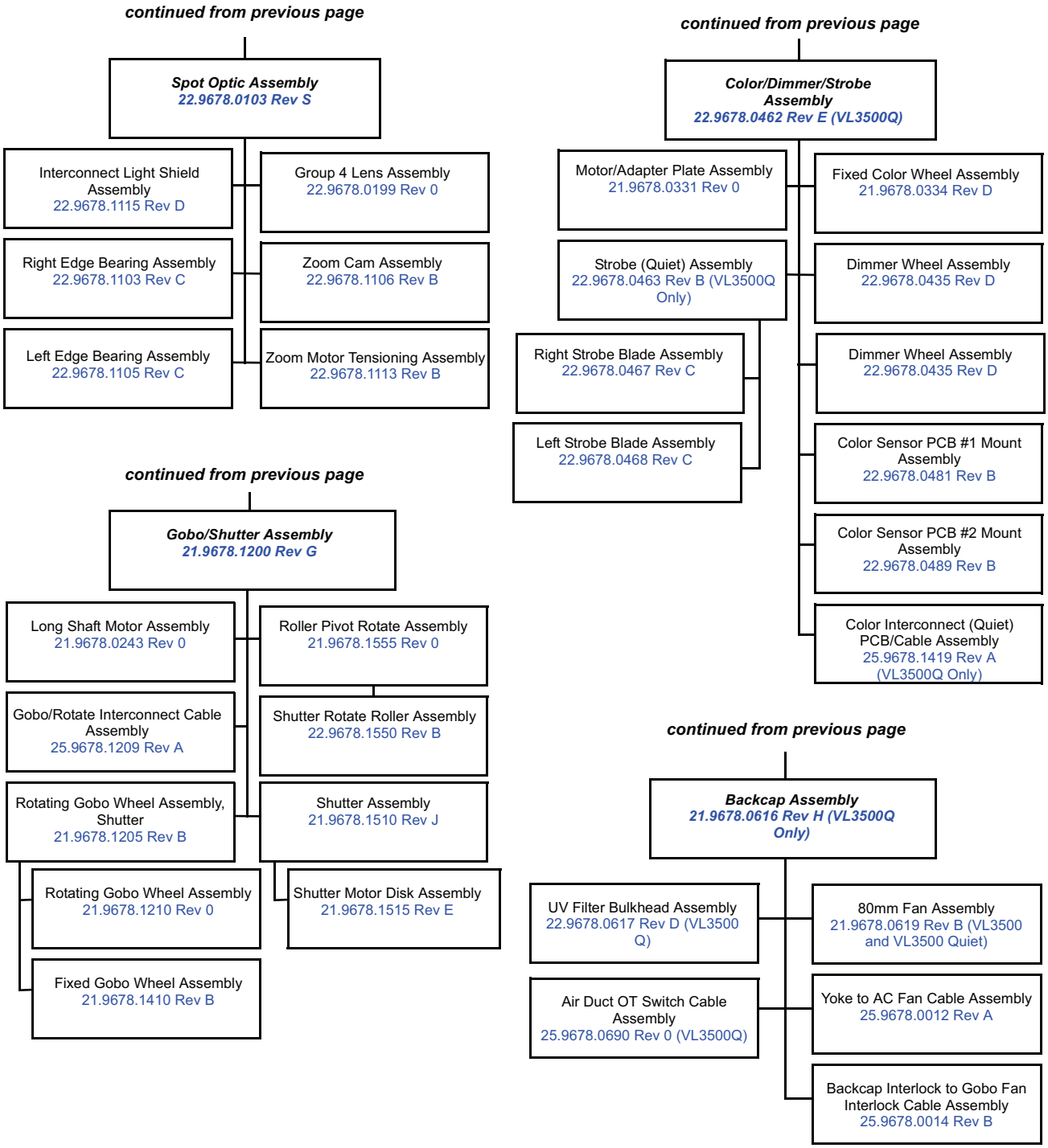


Figure 3-5: VL3500Q Spot Luminaire Subassembly Drawing Tree Part 2

VL3500Q Spot Luminaire (continued)

continued from page 44

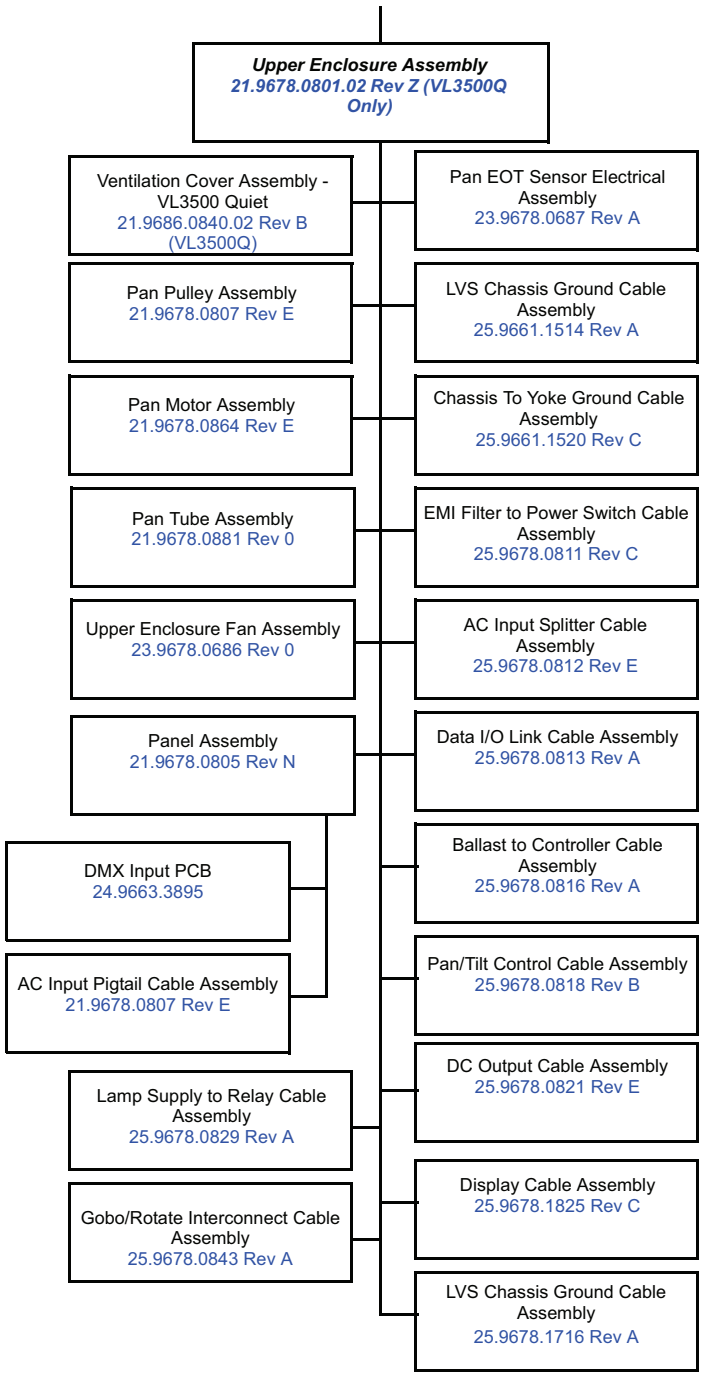


Figure 3-6: VL3500Q Spot Luminaire Subassembly Drawing Tree Part 3

Top Assembly

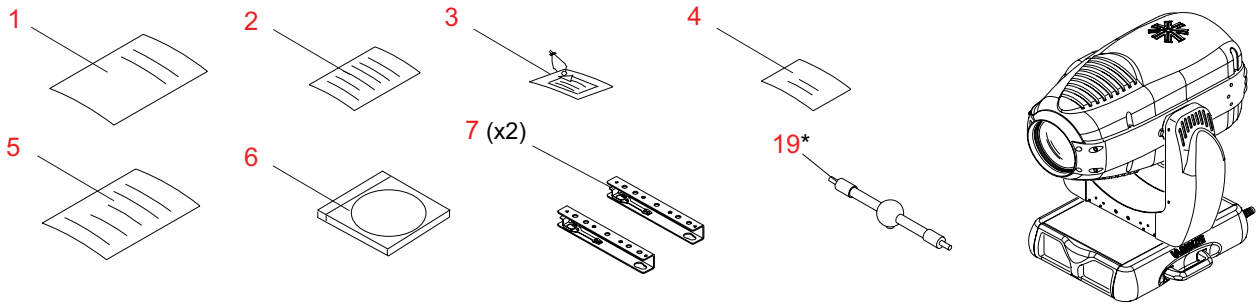
Included Items Kit, Spot

28.9678.0020 Rev E

Refer to Figure 3-7.

No.	Item	Qty.	UM.	Description
1	02.8001.0001	1	EA	PRODUCT SUPPORT SHEET, VARI-LITE CUSTOMER SERVICE
2	02.8052.0001	1	EA	CARD, LIMITED WARRANTY
3	02.8406.0001	1	EA	TAG, LAMP NOTICE
4	02.8700.0001	1	EA	CARD, PRODUCT REGISTRATION
5	02.9678.0002	1	EA	UNPACK/QUICK START SHEET, VL3000
-	04.4037.0001	5	EA	LABEL, 2.5 X .5 BARCODE (**not shown**)
-	07.9678.0036	1	EA	CARDBOARD SHIPPING BOX, VL3000 (**not shown**)
6	08.3500.0001	1	EA	CD-ROM, VL3500 PRODUCT DOCUMENTATION, USER
7	22.9661.1636	2	EA	FAB ASSY, BRACKET TRUSS HOOK
8	41.6030.5011	1	EA	GOBO ASSY, NIGHT SKY
9	41.6030.5503	1	EA	GOBO ASSY, PALM LEAVES
10	41.6030.5523	1	EA	GOBO ASSY, TRIBAL BREAKUP
11	41.6030.6011	1	EA	GOBO ASSY, CIRCLE OF OVALS
12	41.6030.7002	1	EA	GOBO ASSY, PEBBLES
13	41.6030.7014	1	EA	GOBO ASSY, TRIANGLE BREAKUP
14	41.6030.7018	1	EA	GOBO ASSY, SHOCK BREAKUP
15	41.6030.7029	1	EA	GOBO ASSY, ALPHA RAYS
16	41.6030.8503	1	EA	GAG ASSY, GLACIER
17	41.6030.8509	1	EA	GAG ASSY, ICE BLOCKS
18	41.6030.8801	1	EA	GOBO ASSY, MULTI-COLOR CIRCLES
19	71.2557.1200	1	EA	LAMP, 1200 WATT SHORT ARC, DOUBLE-ENDED

Included Items Kit, Spot (continued)



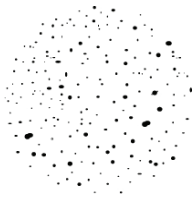
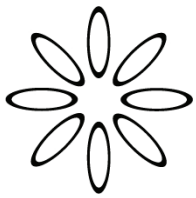
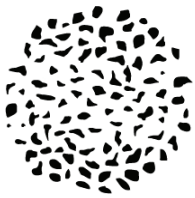
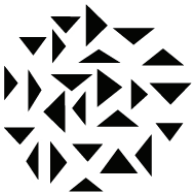
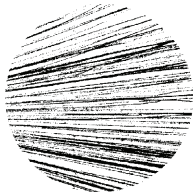
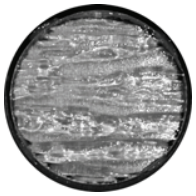
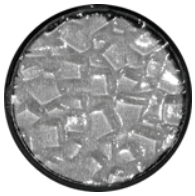
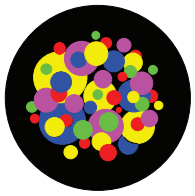
8	9	10	11	12
				
Night Sky	*Palm Leaves*	*Tribal Break-Up*	*Circle of Ovals*	*Pebbles*
13	14	15	16	17
				
Triangle Break-Up	*Shock Break-Up*	*Alpha Rays*	*Glacier Gag*	*Ice Blocks Gag*
18				
				
Multi-Colored Gobo				

Figure 3-7: Included Items Kit, Spot

Note: * = Do not handle lamp with bare hands. When handling, it is best to wear clean cotton gloves in order to keep the lamp's glass as dirt and grease free as possible.

VL3500 Spot Series Luminaire

20.9678.0019 Rev H (VL3500 Only)
20.9678.0020 Rev I (VL3500Q Only)

Refer to Figure 3-8

No.	Item	Qty.	UM.	Description
-	02.8405.0001	1	EA	AC DANGER TAG, VL3000 (**not shown**)
-	04.9661.0033.01	1	EA	LABEL, WARNING - 2000 SERIES (**not shown**)
-	04.9661.0039	1	EA	LABEL, LINE CORD WARNING (**not shown**)
-	04.9678.0063	1	EA	LABEL, AC INPUT RATING VL3500 (**VL3500 ONLY - not shown**)
-	04.9678.1000	2	EA	LABEL, WHITE ROHS COMPLIANT (**not shown**)
-	04.9678.1001	2	EA	LABEL, GREEN ROHS COMPLIANT (**not shown**)
-	04.9678.0064	1	EA	LABEL, AC INPUT RATING VL3500Q (**VL3500Q ONLY - not shown**)
-	10.9678.0609	1	EA	FRONT FILTER, FOAM, ZOOM (**not shown**)
1	10.9686.0617	1	EA	YOKE CROSSMEMBER, HEAT SHIELD
2	10.9678.0658	10	EA	PLATE, COUNTERWEIGHT
3	10.9678.0670	1	EA	INTERCONNECT PCB MOUNT, CYM
4	10.9686.0732	2	EA	COVER, YOKE THERMOFORM
5	21.9678.0010.02	1	EA	ASSY, GENERIC LUMINAIRE (**VL3500 ONLY**)
	21.9678.0011.02	1	EA	ASSY, GENERIC LUMINAIRE (**VL3500Q ONLY**)
6	21.9678.8611	2	EA	ASSY, HEAD COVER
7	21.9678.8698.01	1	EA	ASSY, HOT BOX, SPOT
8	21.9678.0660.03	1	EA	ASSY, DUAL FAN TRAY DUCT (**VL3500 ONLY**)
	21.9678.0659.03	1	EA	ASSY, DUAL FAN TRAY DUCT (**VL3500Q ONLY**)
9	21.9678.1200	1	EA	ASSY, GOBO/SHUTTER MODULE
10	21.9678.1246	1	EA	ASSY, CABLE INTERCONNECT, SHUTTER
11	21.9678.1263	1	EA	ASSY, TRANSFER FAN
12	22.9678.0103	1	EA	ASSY, SPOT OPTIC
13	22.9678.0149	4	EA	ASSY, ROD CLAMP
14	22.9678.0402	1	EA	ASSY, COLOR/DIMMER/STROBE (**VL3500 ONLY**)
	22.9678.0462	1	EA	ASSY, COLOR/DIMMER/STROBE (**VL3500Q ONLY**)
15	22.9678.0693	2	EA	ASSY, GOBO CLAMP
16	22.9678.0694	2	EA	ASSY, COLOR CLAMP
17	22.9678.1126	1	EA	ASSY, LEAD SCREW EDGE
18	24.9678.4730	1	EA	PCB ASSY, VL3500 CONTROLLER
-	25.9678.0675	1	EA	CABLE ASSY, RELAY TO GOBO FAN (**not shown**)

No.	Item	Qty.	UM.	Description
-	25.9678.0677	1	EA	CABLE ASSY, FRONT HEAD FANS (**not shown**)
-	25.9661.1520	1	EA	CABLE ASSY, YOKE TO HEAD GND (**not shown**)
-	25.9678.1715	1	EA	CABLE ASSY, HEAD CONTROL (**not shown**)
-	28.9678.0020	1	EA	INCLUDED ITEMS KIT, VL3500 SHUTTER (**not shown**)
19	53.2001.0003	4	EA	NUT, 10-32 NYLON INSERT
20	53.2002.0003	4	EA	NUT, 6-32 HEX ZINC NYLON IN
21	53.2202.0008	1	EA	NUT, 8-32 HEX SS, NYLON INSERT
22	53.6523.0013	8	EA	SCREW, 6-32 X 3/8" PTB
23	53.6558.0007	4	EA	SCREW, 6-32 X 1/4" LG PPZ SEMS EXT ZINC PLT
24	53.6558.0009	8	EA	SCREW, 6-32 X 3/8" LG PPZ SEMS
25	53.6558.0016	2	EA	SCREW, 6-32 X 3/4" LG PPB ZINC SEMS EXT
26	53.6579.0001	4	EA	SCREW, 10-32 X 1/2" SCB
27	53.6613.0001	2	EA	SCREW, 6-32 X 1/2" PPZ
28	53.6614.0003	4	EA	SCREW, 6-32 X 5/8" PFZ
29	53.6616.0001	4	EA	SCREW, 6-32 X 3/4" PPZ
30	55.2141.0001	2	EA	STANDOFF, 5/16" HEX, 6-32 X 7/16" LG, MF
31	55.2150.0002	2	EA	STANDOFF, 1/4" HEX 6-32 1.188" LG MF STL
32	55.2284.0001	2	EA	CARD GUIDE, 3" LONG SNAP IN
33	55.6506.0024	2	EA	SPACER, 3/16" RND 0.1875" LG 0.141
34	55.6528.0001	2	EA	WASHER, #6 FLAT ZINC
35	55.6573.0001	2	EA	HARDENED SHAFT, 10 MM DIA X 200
36	55.6677.0033	4	EA	WASHER, 0.201" OD 0.125" ID 0.032" THK FLAT SS
37	10.9678.0671	1	EA	INTERCONNECT PCB MOUNT, RG
	55.6699.0003	.830	FT	SLEEVING, 1/2" NOM.DIA. POLY (**not shown**)
-	55.6699.0004	1.16	FT	SLEEVING, 3/4" NOM.DIA. POLY (**not shown**)

VL3500 Spot Series Luminaire (continued)

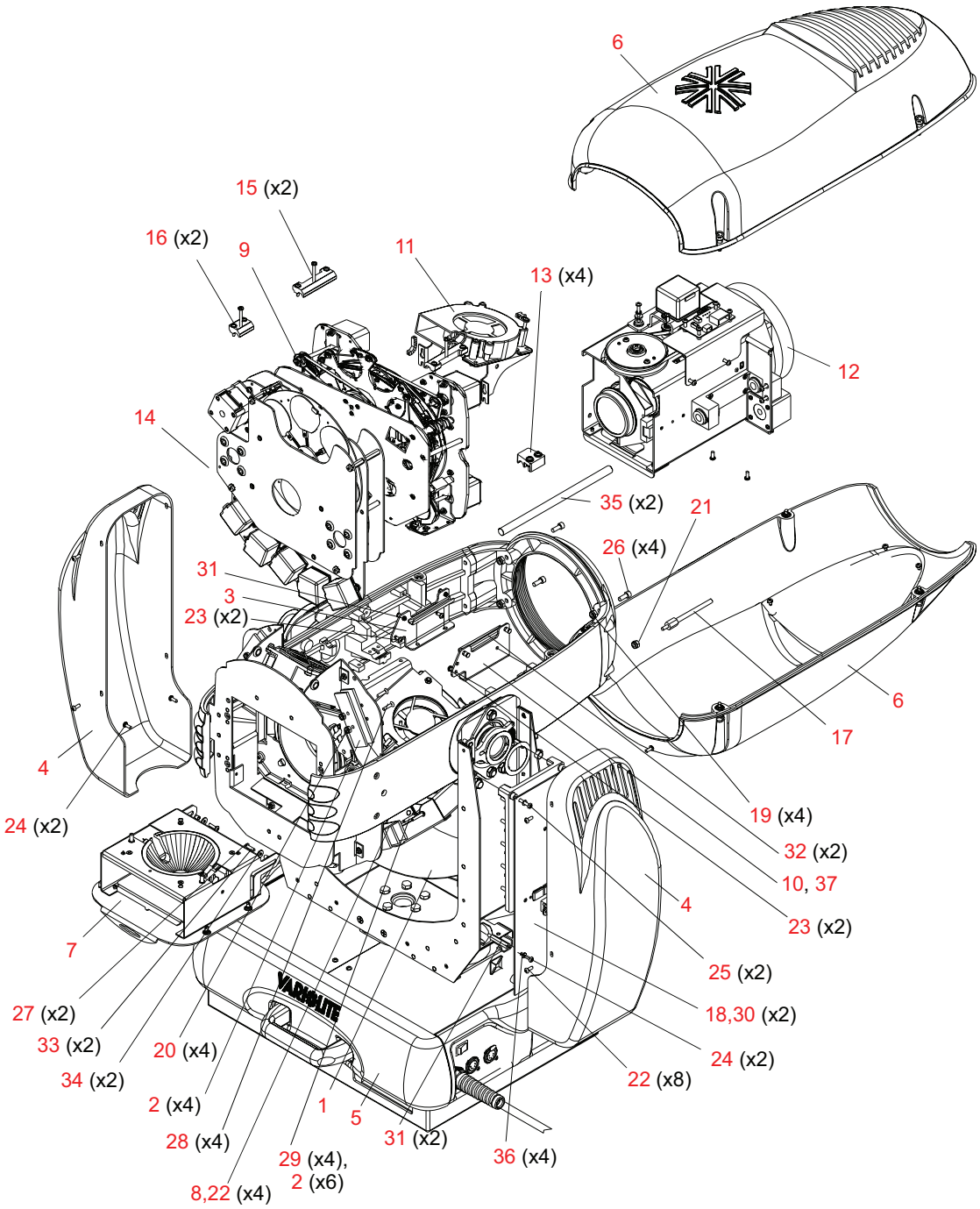


Figure 3-8: VL3500 Series Spot Luminaire

Generic Luminaire Assembly

21.9678.0010.02 Rev H (VL3500 Only)
21.9678.0011.02 Rev C (VL3500Q Only)

Refer to Figure 3-9

No.	Item	Qty.	UM.	Description
1	21.9678.0600	1	EA	ASSY, HEAD STRUCTURE
	21.9678.0601	1	EA	ASSEMBLY, HEAD STRUCTURE, QUIET
2	21.9678.0700	1	EA	ASSY, YOKE
	21.9678.0701	1	EA	ASSEMBLY, YOKE, QUIET
3	21.9678.0707	1	EA	ASSEMBLY, TILT PULLEY
3a	- 10.9678.0750	1	EA	TIMING PULLEY, 150 TOOTH
3b	- 10.9678.0754	1	EA	FLAG, CENTER OF TRAVEL, TILT
3c	- 53.6530.0006	3	EA	RIVET, 1/8" OD POP 0.188 - 0.250GL
4	21.9678.0767	1	EA	ASSEMBLY, STABILIZER
4a	- 10.9678.0757	1	EA	STABILIZER, 1.377 DIA
4b	- 10.9678.0762	1	EA	BRACKET, STABILIZER
4c	- 53.6610.0003	1	EA	SCREW, 6-32 X 7/16" PPZ
4d	- 55.6568.0075	1	EA	SPRING, EXTSN 0.375" OD 1.00" LG 0.041" WIRE DIA
5	21.9678.0800.02	1	EA	ASSY, UPPER ENCLOSURE
	21.9678.0801.02	1	EA	ASSEMBLY, UPPER ENCLOSURE, QUIET
6	53.2019.0004	4	EA	NUT, 3/8-16 X 7/32"THK HEX JAM GRD5 ZINC PLT
7	53.6505.0020	5	EA	BOLT, 1/4-28X 3/4"HX HD GRD 8 ZINC PLT FULL THRD
8	53.6505.0026	4	EA	BOLT, 3/8-16 X 0.500" LG H X HD GRADE 5 BLK 9/16" HEX HEAD X 0.23 TALL
9	53.6539.0001	4	EA	WASHER, 3/8" SPLIT LOCK
10	53.5564.0250	1	EA	SCREW, 6-32 X 1/4" PFB UNDERCUT
11	53.6624.0001	4	EA	SCREW, 10-32 X 1/2"LG PFB
12	53.6513.0044	3	EA	SCREW, M5 X 10MM STL CUP PT
13	54.1206.0014	2	EA	RING, RETAINING 1.375"SHAFT 1.291" GRV DIA 0.056"GRVWD EXT
14	54.1255.0001	2	EA	BEARING ASSY, BLACK FLUSH MOUNT HOUSING
15	54.2055.0001	1	EA	BELT, TIMING S2M 210 GROOVE 9MM WIDE URETHANE/KEVLAR
16	55.6549.0001	5	EA	WASHER, 1/4" SPLIT LOCK
17	55.6799.0001	2	EA	SHIM, 1-3/8" ID, 1-7/8" OD, 0.010" THK, SS
18	55.6799.0002	2	EA	SHIM, 1-3/8"ID, 1-7/8" OD, 0.005" THK, SS

Generic Luminaire Assembly (continued)

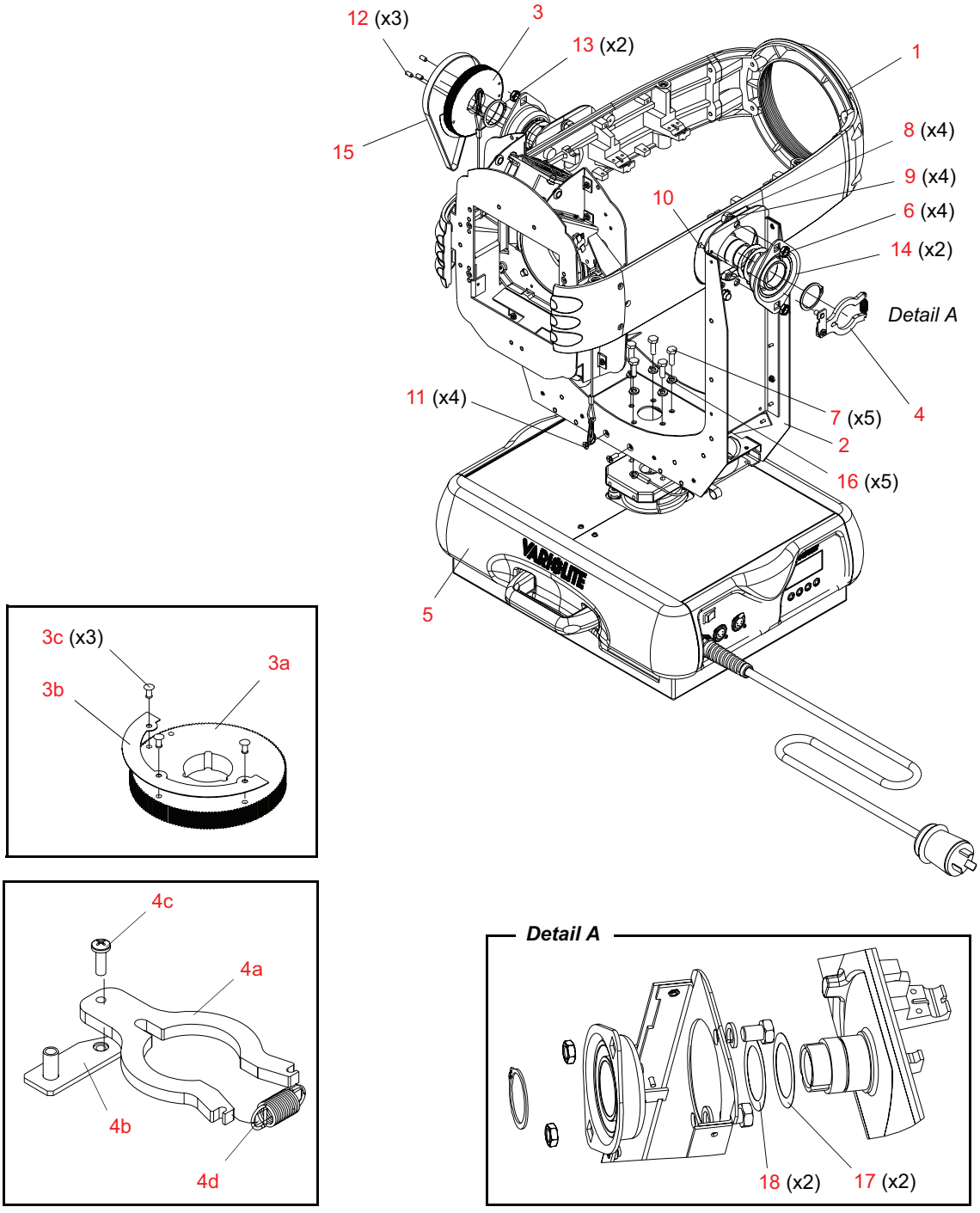


Figure 3-9: Generic Luminaire Assembly

Head Assembly

Head Structure Assembly

21.9678.0600 Rev C (VL3500 Only)
21.9678.0601 Rev 0 (VL3500Q Only)

Refer to Figure 3-1

No.	Item	Qty.	UM.	Description
1	10.9678.8620	1	EA	FRONT CASTING
2	12.9678.8623	1	EA	RIGHT SIDE RAIL, MACHINED
3	12.9678.8625	1	EA	LEFT SIDE RAIL, MACHINED
4	21.9678.0615	1	EA	ASSY, BACKEND (**VL3500 ONLY**)
	21.9678.0616	1	EA	ASSEMBLY, BACKEND (**VL350OQ ONLY**)
5	53.6515.0001	6	EA	SCREW, 10-32 X 3/4" SCB CAP
6	53.6515.1000	1	EA	SCREW, 10-32 X 1" SOCKET CAP BLACK
7	53.6615.1125	3	EA	SCREW, 10-32 X 1.25" SOCKET CAP BLACK

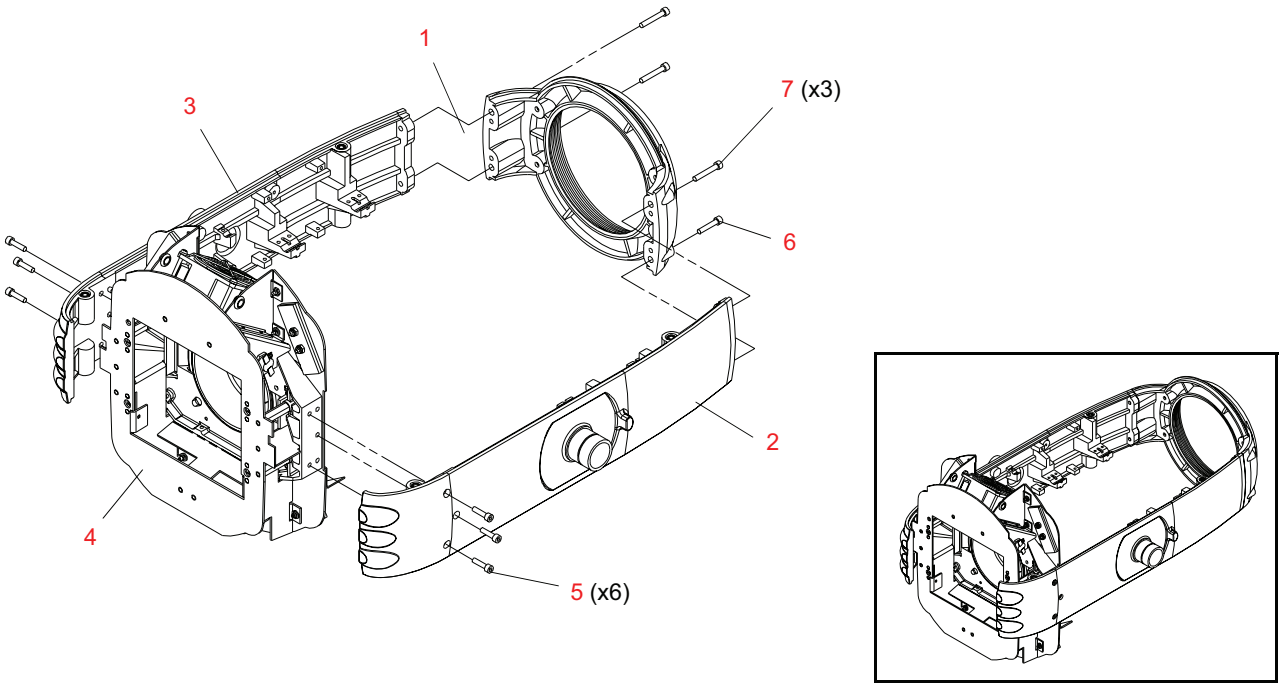


Figure 3-1: Head Structure Assembly

Head Cover Assembly

21.9678.8611 Rev -

Refer to Figure 3-2

No.	Item	Qty.	UM.	Description
1	10.9678.0612	1	EA	HEAD COVER FOAM BAFFLE
2	10.9678.0649	4	EA	EJECTOR SPRING, BLACK OXIDE
3	10.9678.0674	1	EA	BRACKET, COVER TETHER
4	10.9678.0696	1	EA	FOAM FRAME, HEAD COVER
5	12.9678.8610	1	EA	HEAD COVER, PAINTED
6	53.6558.0003	1	EA	SCREW, 6-32 X 3/8"LG PPZ PLASTIC THD ROLL
7	53.5655.0250	4	EA	SCREW, 6-32 X 1/4"LG PPZ PLASTIC THD ROLL
8	55.2233.0016	4	EA	RETAINER, SPLIT RING
9	55.2233.0775	4	EA	STUD, 1/4 TURN OPR.775L STEEL
10	55.9676.0255	4	EA	WASHER, BELLEVILLE SPRING

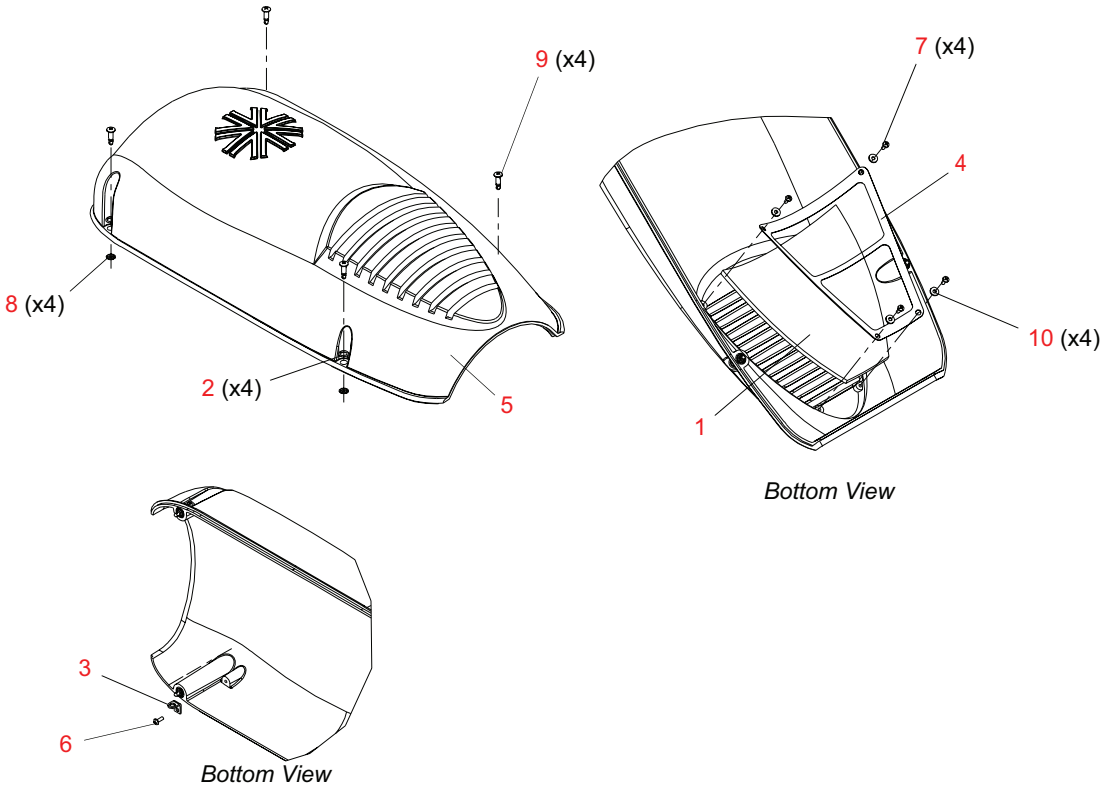


Figure 3-2: Head Cover Assembly

Backcap Assembly

21.9678.0615 Rev T (VL3500 Only)
21.9678.0616 Rev H (VL3500Q Only)

Refer to Figure 3-3

No.	Item	Qty.	UM.	Description
1	10.9678.0631	1	EA	SEPARATION BULKHEAD
2	10.9678.8635	1	EA	EXHAUST BULKHEAD
3	10.9678.0637	2	EA	CLIP, RETRO-REFLECTOR
4	10.9678.0638	1	EA	AIR DIVERTER, STROBE MOTOR
5	10.9678.0653	1	EA	LIGHT BAFFLE, EXHAUST
6	12.9678.7152	1	EA	REFLECTOR, RETRO SPHERICAL COATED
7	12.9678.0627	1	EA	AFT BULKHEAD, MACHINED
8	21.9678.0619	1	EA	FAN ASSY, 80MM
9	21.9678.0673	2	EA	TETHER ASSY, COVER
10	22.9678.3655	1	EA	DUCT ASSY, 80MM FAN
11	22.9678.0639	1	EA	UV FILTER BULKHEAD ASSY
	22.9678.0617	1	EA	UV FILTER BULKHEAD ASSY (VL3500 QUIET)
-	25.9678.0012	1	EA	CABLE ASSY, AC FAN YOKE TO FAN (**not shown**)
-	25.9678.0014	1	EA	CABLE ASSY, BACKCAP INTERLOK TO GOBO INTERLOK (**not shown**)
-	25.9678.0691	1	EA	CABLE ASSY, OT SWITCH (**not shown**)
	25.9678.0690	1	EA	CABLE ASSY, OT SWITCH (VL3500 QUIET) (**not shown**)
12	53.2004.0002	6	EA	NUT, 8-32 KEPS ZINC PLATE
13	53.6519.0001	2	EA	SCREW, 4-40 X 5/8" PPZ
14	53.6545.0009	4	EA	SCREW, 8-32 X 1.375"LG PFZ
15	53.6523.0001	1	EA	SCREW, 6-32 X 3/8" SCB
16	53.6558.0007	6	EA	SCREW, 6-32 X 1/4" PPZ SEMS
17	53.6559.0001	4	EA	SCREW, 4-40 X 1/4" PFZ
18	53.6609.0001	6	EA	SCREW, 6-32 X 3/8" PFZ
19	53.6613.0001	1	EA	SCREW, 6-32 X 1/2" PPZ
20	53.6614.0003	2	EA	SCREW, 6-32 X 5/8" PFZ
21	53.6616.0001	2	EA	SCREW, 6-32 X 3/4" PPZ
22	53.6682.0002	2	EA	SCREW, 4-40 X 1/4"LG PPZ SEMS
23	55.2125.0003	4	EA	STANDOFF, 3/8"HEX 8-32 1.500"L
24	55.6538.0004	7	EA	WASHER,.750"OD.312"ID.125TH
25	55.6541.0008	1	EA	GROMMET, 1/2"ID 7/8"OD 3/4"GRV
26	55.6706.0001	4	EA	GROMMET, 9/32"ID 9/16"OD 1/4T

No.	Item	Qty.	UM.	Description
27	74.1099.0001	1	EA	SWITCH, MINIATURE 5AMP 150DEG
-	10.9678.0680	1	EA	INSULATOR, TEFLON TO-220 (**not shown**)
-	53.2200.0004	1	EA	NUT, 4-40 KEPS SS
28	53.6613.0004	3	EA	SCREW, 6-32 X 1/2" SCZ
29	10.9678.1645	1	EA	FAN SHIELD, LAMP COOLING
30	55.6538.0001	2	EA	WASHER, #4 LOCK, INTERNAL TOOTH

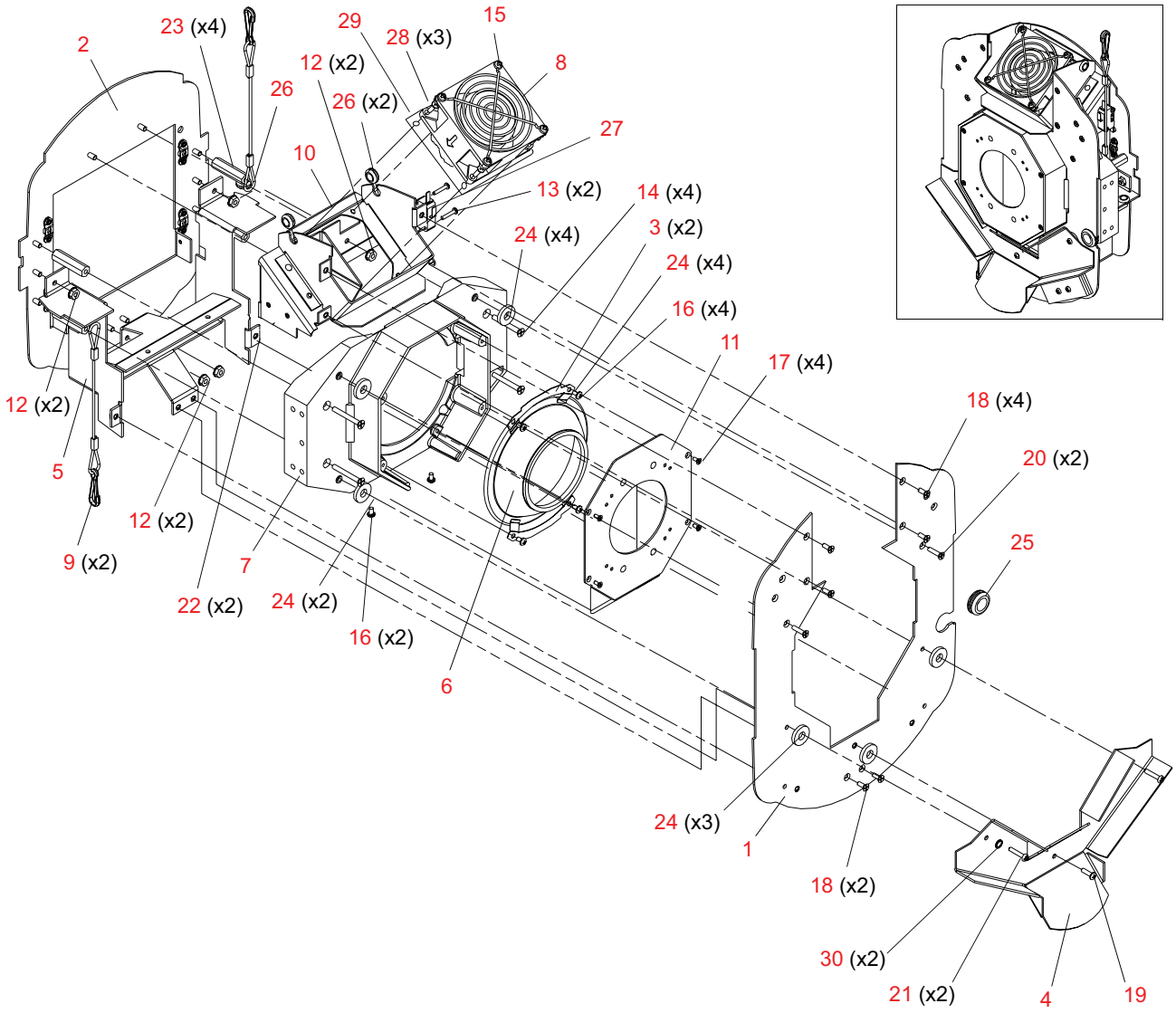


Figure 3-3: Backcap Assembly

80mm Fan Assembly

21.9678.0619 Rev B (VL3500 and VL3500 Quiet)

Refer to Figure 3-4

No.	Item	Qty.	UM.	Description
1	40.7145.0004	1	EA	FAN, TUBEAXIAL 80 X 80 X 38MM 230V 28 CFM
2	53.2200.0006	4	EA	NUT, 6-32 KEPS SS
3	53.6558.0001	4	EA	SCREW, 6-32 X 3/8" PPZ
4	55.7016.0001	1	EA	FAN GUARD, 80MM NICKEL PLATED STEEL WIRE

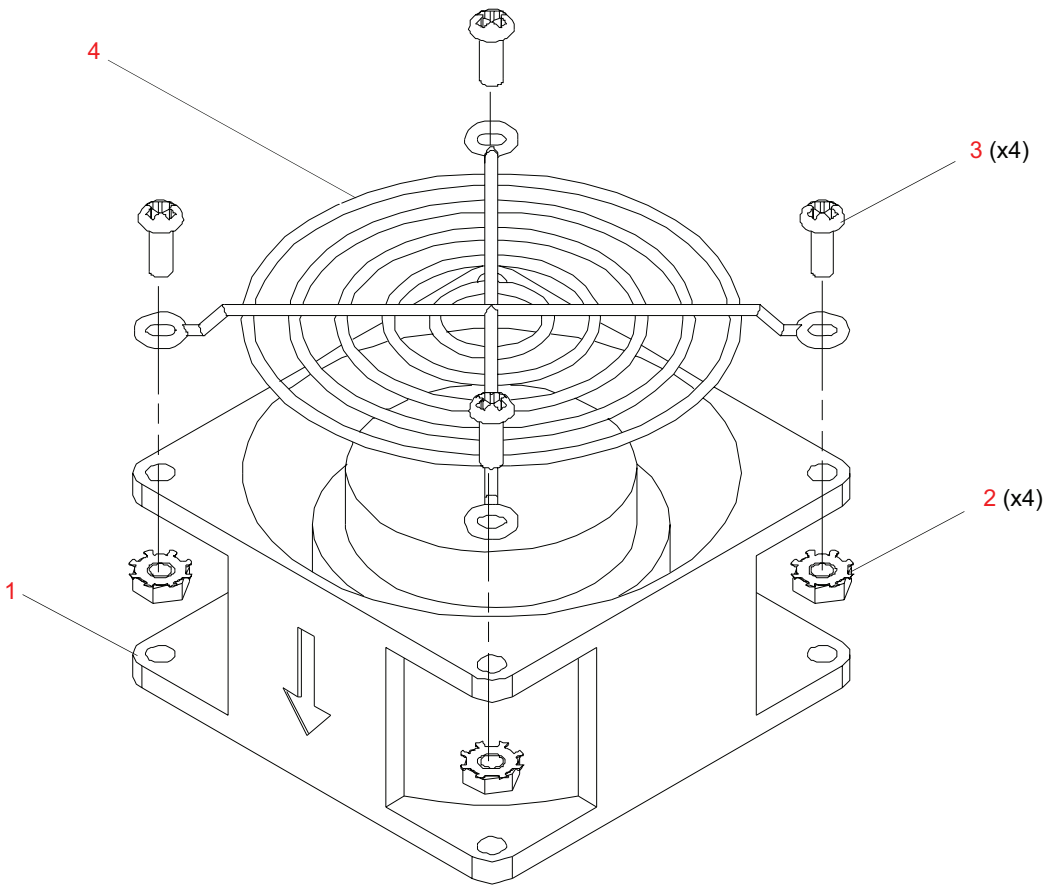


Figure 3-4: 80mm Fan Assembly - VL3500 and VL3500 Quiet

UV Filter Bulkhead Assembly

22.9678.0617 Rev D (VL3500 Q)
22.9678.0639 Rev G (VL3500)

Refer to Figure 3-5

No.	Item	Qty.	UM.	Description
1	10.9678.0634	1	EA	UV FILTER BULKHEAD
2	10.9678.0648	2	EA	CLIP, UV GLASS
3	41.9678.0608	1	EA	UV/IR FILTER, 3.00" X 3.00"
	41.9678.1160	1	EA	UV/IR FILTER, 3.00" X 3.00" (VL3500 QUIET)
4	53.6530.0002	4	EA	RIVET, 1/8 OD POP,.063-.125 GRIP, ALUM

***Note:** Install glass (item 3) with marks indicating IR coating side of filter facing up and located outside of circular cutout in bulkhead (Item 1).

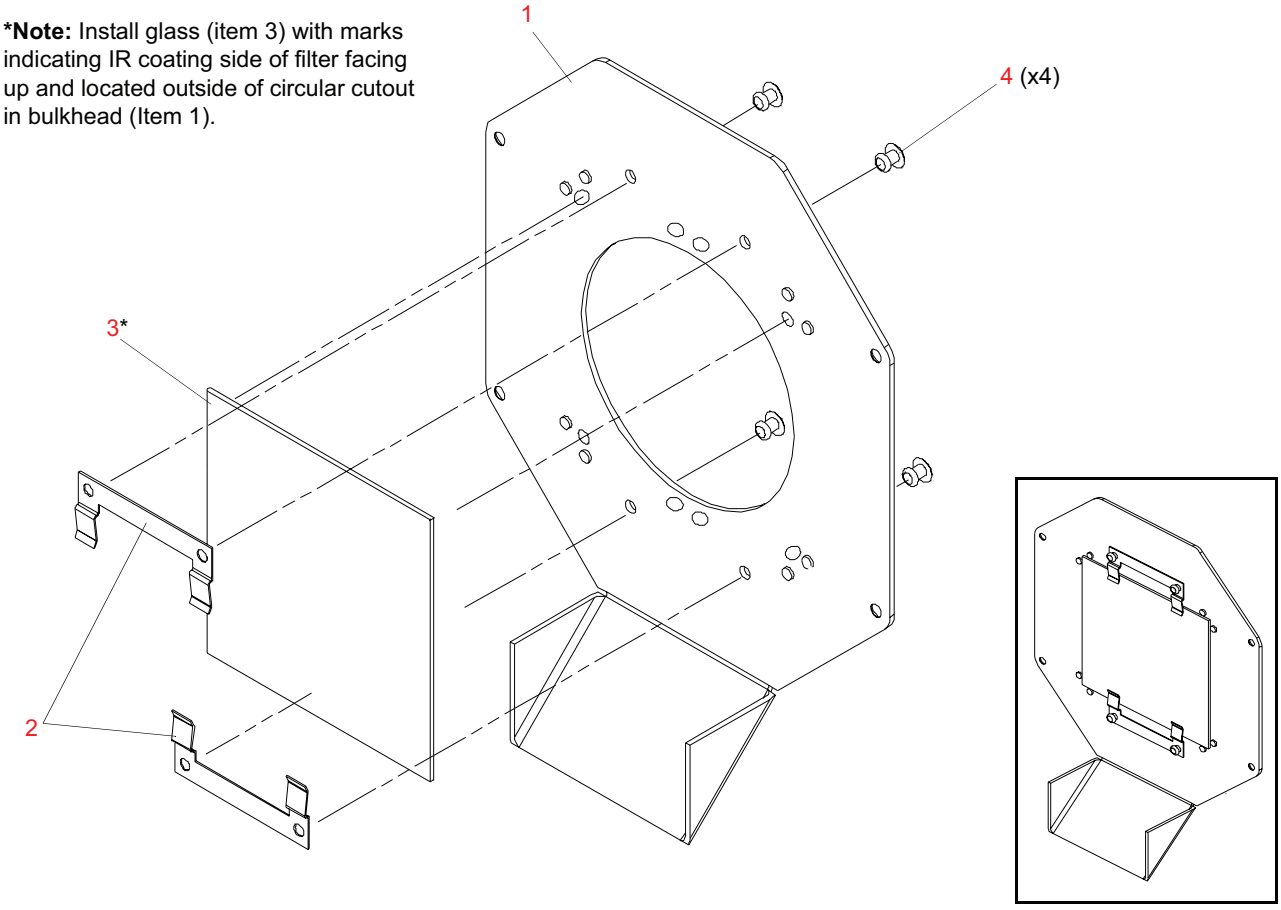


Figure 3-5: UV Filter Bulkhead Assembly

Gobo/Shutter Assembly

21.9678.1200 Rev G

Refer to Figure 3-6

No.	Item	Qty.	UM.	Description
1	10.9678.0338	1	EA	PULLEY, ZOOM MOTOR
2	10.9678.0225	6	EA	SHAFT, GOBO WHEEL
3	10.9678.0231	2	EA	PULLEY, MOTOR GOBO WHEEL DRIVE
4	10.9678.0232	1	EA	PULLEY, INDEX DRIVE 64 GROOVE
5	10.9678.0246	3	EA	ADJUST PLATE, MOTOR
6	10.9678.1215	1	EA	BULKHEAD, SHUTTER MODULE FRONT
7	10.9678.1244	1	EA	MOUNT, INDEX SENSOR LONG
8	10.9678.1558	1	EA	SPRING, TENSION, SHUTTER ROTATE
9	21.9678.0243	2	EA	ASSY, MOTOR LONG SHAFT
10	21.9678.1205	1	EA	ASSY, ROTATING GOBO WHEEL, SHUTTER
11	21.9678.1510	1	EA	ASSY, SHUTTER
12	21.9678.1555	2	EA	ASSY, ROLLER PIVOT, ROTATE
13	22.9678.1550	2	EA	ASSY, SHUTTER ROTATE ROLLER
14	24.9663.3231	2	EA	PCB ASSY, INDEX SENSOR
-	25.9678.1209	1	EA	CABLE ASSY, GOBO/ROTATE INTERCONNECT (**Not Shown**)
15	44.9663.1202	1	EA	MOTOR, 17 2.42" SHAFT 11.8MH
16	44.9663.1766	1	EA	MOTOR, 17 1.24" SHAFT 11.8MH 5
17	53.5558.0125	8	EA	SCREW, 8-32 X.125" SET SS
18	53.5638.0252	6	EA	SCREW, 6-32 X 3/8" PFZ UNDERCUT HD
19	53.6520.0375	2	EA	SCREW, 4-40 X 3/8" PPZ SEMS
20	53.6558.0001	4	EA	SCREW, 6-32 X 3/8" PPZ
21	53.6558.0009	4	EA	SCREW, 6-32 X 3/8" LG PPZ SEMS
22	53.6609.0001	6	EA	SCREW, 6-32 X 3/8" PFZ
23	53.6613.0001	8	EA	SCREW, 6-32 X 1/2" PPZ
24	53.6682.0002	2	EA	SCREW, 4-40 X 1/4" PPZ SEMS
25	54.1259.0004	2	EA	BEARING, FLANGED.25" ID.625" OD.0005 RP
26	54.2062.0001	1	EA	BELT, TIMING MXL.080"PITCH 160 GRV 1/8" W POL/KVLR
27	55.2178.0001	4	EA	CABLE ANCHOR MOUNT, #8 SCREW
28	55.6506.0001	1	EA	SPACER, 3/8" RND.297" LG.257" ID
29	55.6506.0030	1	EA	SPACER, 3/8" RND 3/8" LG.257" ID THRU ALUM
30	55.6506.0032	1	EA	SPACER, 3/8" RND 1-1/4" LG.257"ID THRU AL

No.	Item	Qty.	UM.	Description
31	55.6506.0033	4	EA	SPACER, 3/8" RND 1-1/8" LG.257"ID THRU AL
32	55.6520.0001	4	EA	WASHER WAVE SPRING.265" ID.367" OD.006" THK

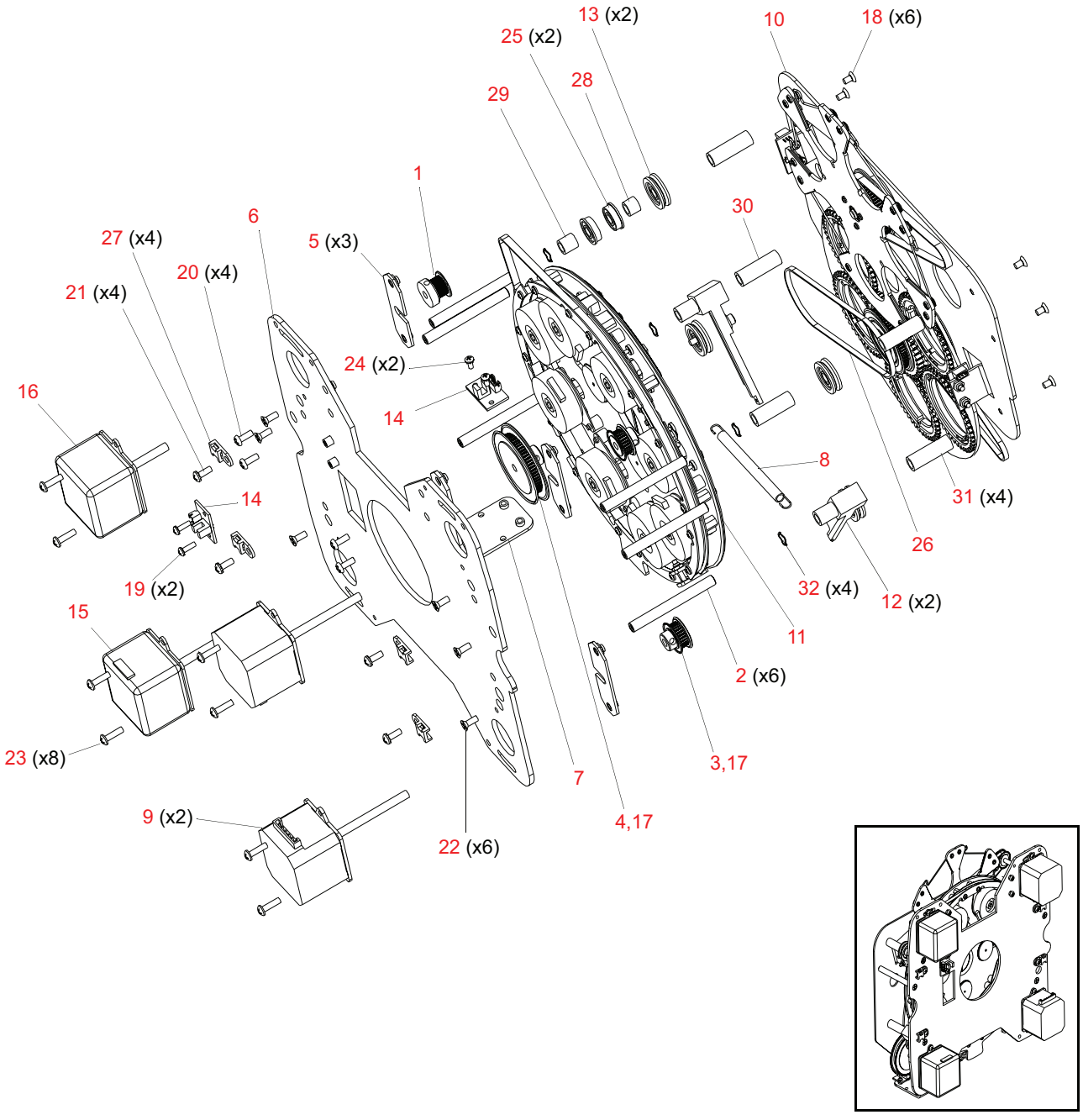


Figure 3-6: Gobo/Shutter Assembly

Rotating Gobo Wheel Assembly, Shutter

21.9678.1205 Rev B

Refer to Figure 3-7

No.	Item	Qty.	UM.	Description
1	10.9678.1216	1	EA	BULKHEAD, SHUTTER MODULE, REAR
2	10.9678.1225	2	EA	SHAFT, GOBO WHEEL, CANTILEVER
3	21.9678.1210	1	EA	ASSY, ROTATING GOBO WHEEL
4	21.9678.1410	1	EA	ASSY, FIXED GOBO WHEEL
5	24.9678.3240	2	EA	ASSY, PCB, WHEEL POSITION SENSOR
6	53.6520.0001	4	EA	SCREW, 4-40 X 3/8" PPZ
7	53.6601.0001	6	EA	SCREW, 4-40 X 3/16" PFZ
8	54.2007.0001	2	EA	RING, RETAINING, EXTERNAL, 1/4" SHAFT DIA
9	54.2057.0001	1	EA	TIMING BELT, MXL, 144 GRV,.188" WD, KEVLAR
10	54.2061.0001	1	EA	TIMING BELT, MXL, 144 GRV,.125" WD, KEVLAR
11	55.2110.0002	2	EA	WASHER,.400" OD,.260" ID,.010" THK FLAT SS
12	55.6506.0034	1	EA	SPACER,.375" OD,.257" ID,.063" LG, AL
13	55.6520.0001	2	EA	WASHER, WAVE SPRING,.265" ID,.367" OD,.006" THK

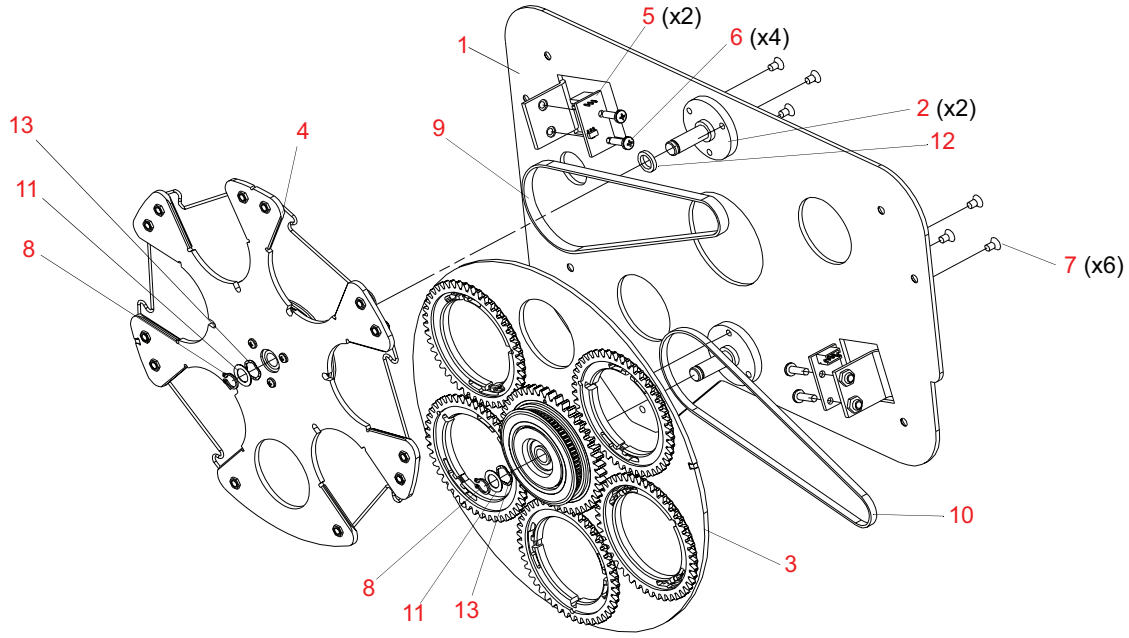


Figure 3-7: Rotating Gobo Wheel Assembly

Fixed Gobo Wheel Assembly

21.9678.1410 Rev B

Refer to Figure 3-8

No.	Item	Qty.	UM.	Description
1	10.9678.0250	1	EA	MAGNET TAPE.375"W x.625" L x.0035" THICK
2	10.9678.1412	1	EA	PLATE, ROTATING GOBO WHEEL
3	10.9678.1425	6	EA	FIXED GOBO RETAINING WIRE
4	22.9678.1415	1	EA	ASSY, PULLEY, FIXED WHEEL HUB
5	53.6601.0002	12	EA	SCREW, 4-40 X 3/16" PTHZ
6	53.6650.0001	3	EA	SCREW, 2-56 X 5/16" PPZ
7	55.2256.0001	1	EA	MAGNET, 2:17 SMCO 2MM X 2MM X 3MM
8	55.3301.0008	6	EA	WASHER, #8 FLAT SS
9	55.6568.0078	6	EA	SPRING, CURVED DISK.322" OD,.174" ID.005 T

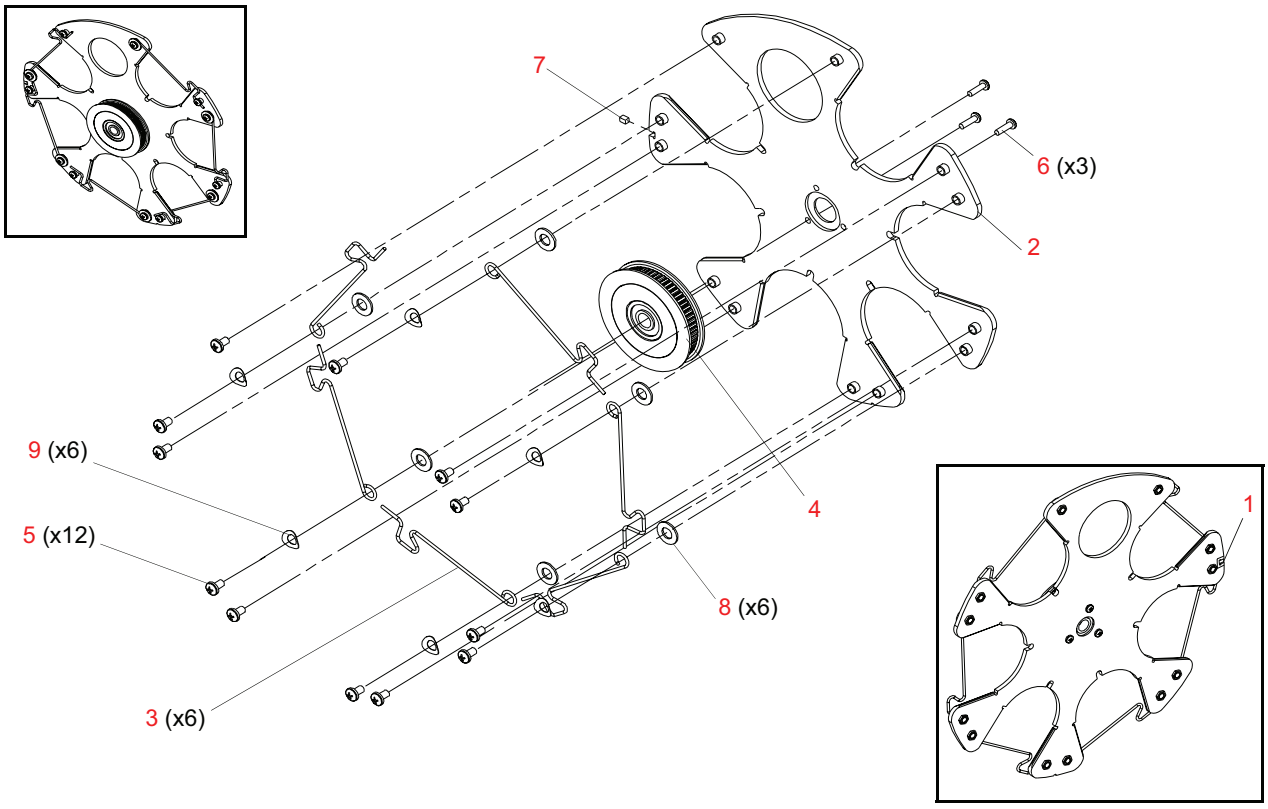


Figure 3-8: Fixed Gobo Wheel Assembly

Rotating Gobo Wheel Assembly

21.9678.1210 Rev 0

Refer to Figure 3-9

No.	Item	Qty.	UM.	Description
1	10.9678.0250	1	EA	MAGNET TAPE.375"W x.625" L x.0035" THICK
2	10.9663.1211	10	EA	SPACER, TEFLON GOBO GEAR
3	10.9663.1240	5	EA	BEARING, GOBO WHEEL BORE
4	10.9678.0220	1	EA	PLATE, ROTATING GOBO WHEEL
5	10.9678.0224	5	EA	RETAINING RING, PLANET
6	12.9678.1223	1	EA	SUN GEAR, MOLDED, WITH FLANGE, MODIFIED
7	22.9678.0230	5	EA	ASSY, PLANET GEAR
8	22.9678.1234	1	EA	ASSY, PULLEY GOBO WHEEL HUB
9	22.9678.1235	1	EA	ASSY, GOBO WHEEL HUB, INDEX
10	53.6659.0009	3	EA	SCREW, 2-56 X 7/16" PPZ
11	55.2256.0001	1	EA	MAGNET, 2:17 SMCO 2MM X 2MM X 3MM

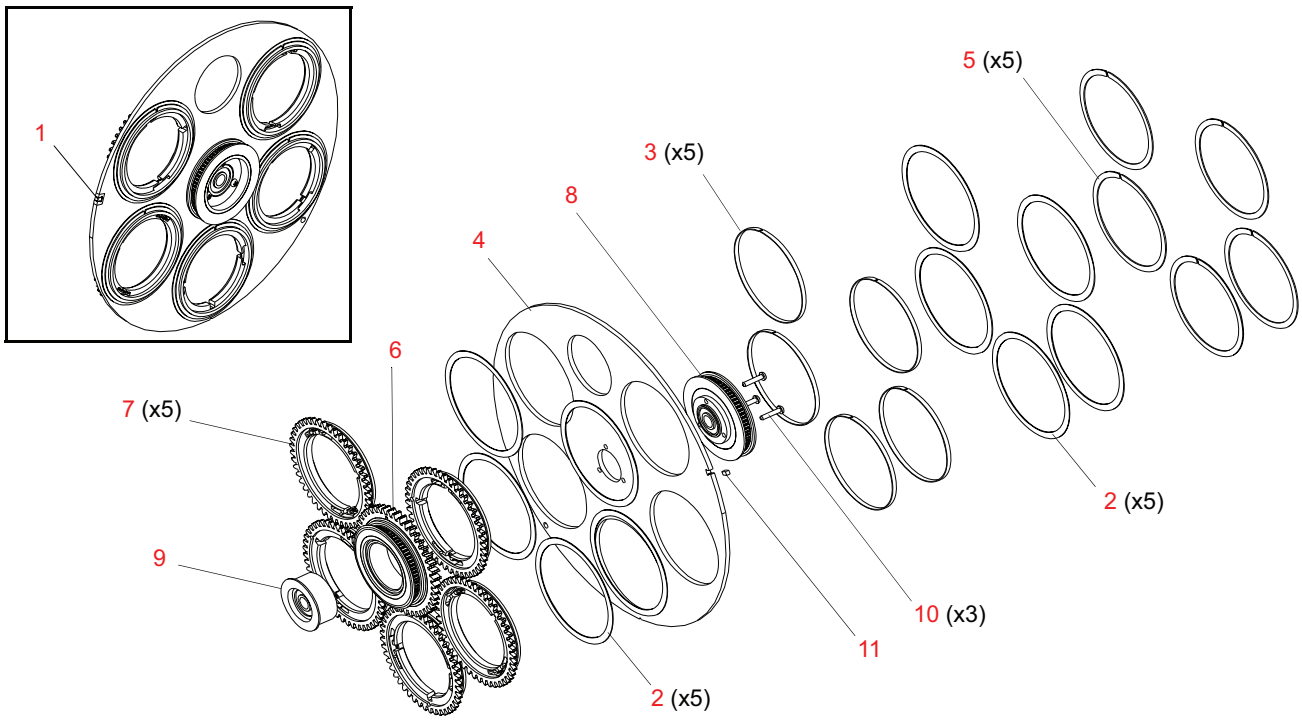


Figure 3-9: Rotating Gobo Wheel Assembly

Roller Pivot Rotate Assembly

21.9678.1555 Rev 0

Refer to Figure 3-10

No.	Item	Qty.	UM.	Description
1	10.9678.1551	1	EA	ROLLER PIVOT, SHUTTER ROTATE
2	22.9678.1550	1	EA	ASSY, SHUTTER ROTATE, ROLLER
3	53.6609.0001	1	EA	SCREW, 6-32 X 3/8" PFZ

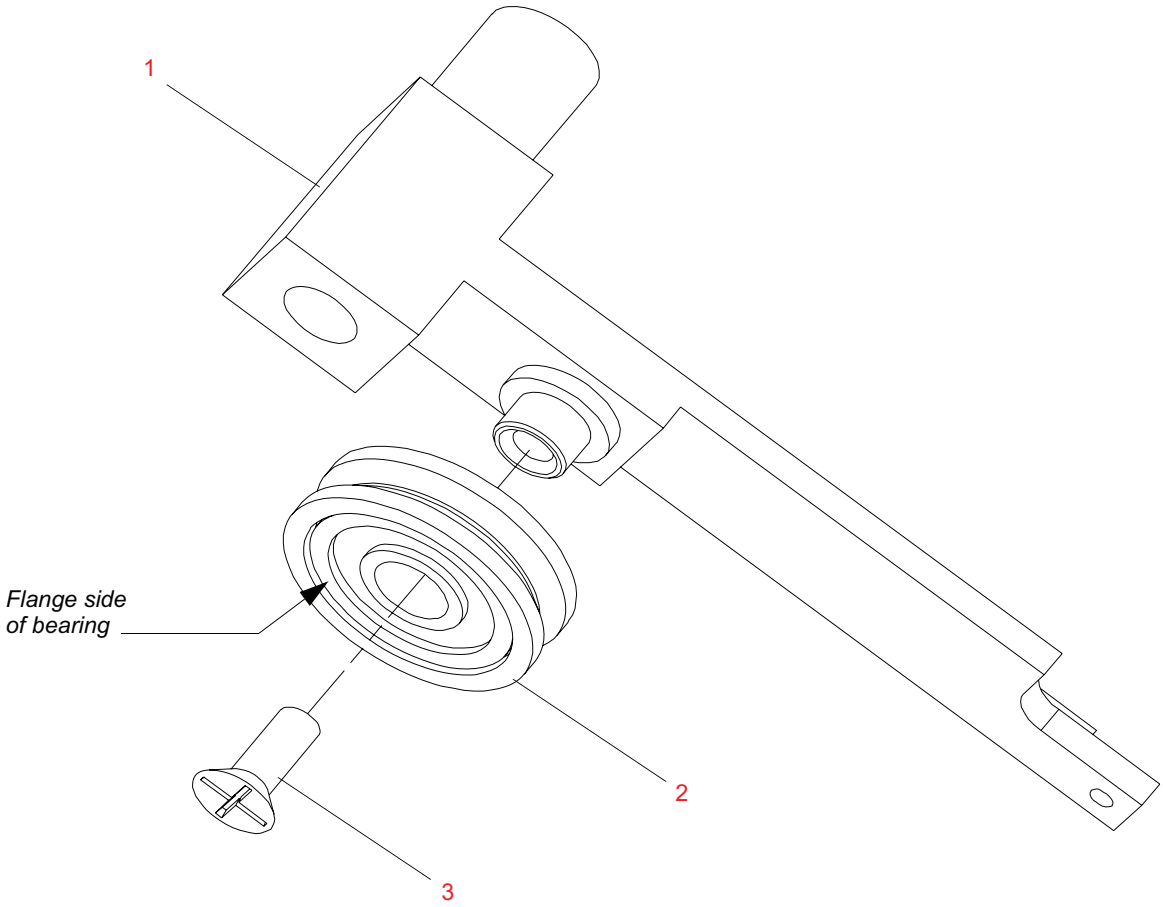


Figure 3-10: Roller Pivot Rotate Assembly

Shutter Rotate Roller Assembly

22.9678.1550 Rev B

Refer to Figure 3-11

No.	Item	Qty.	UM.	Description
1	10.9678.1552	1	EA	ROLLER SHUTTER ROTATE
2	54.1259.0005	1	EA	BEARING, FLANGED,.25" ID,.625" OD,.0001

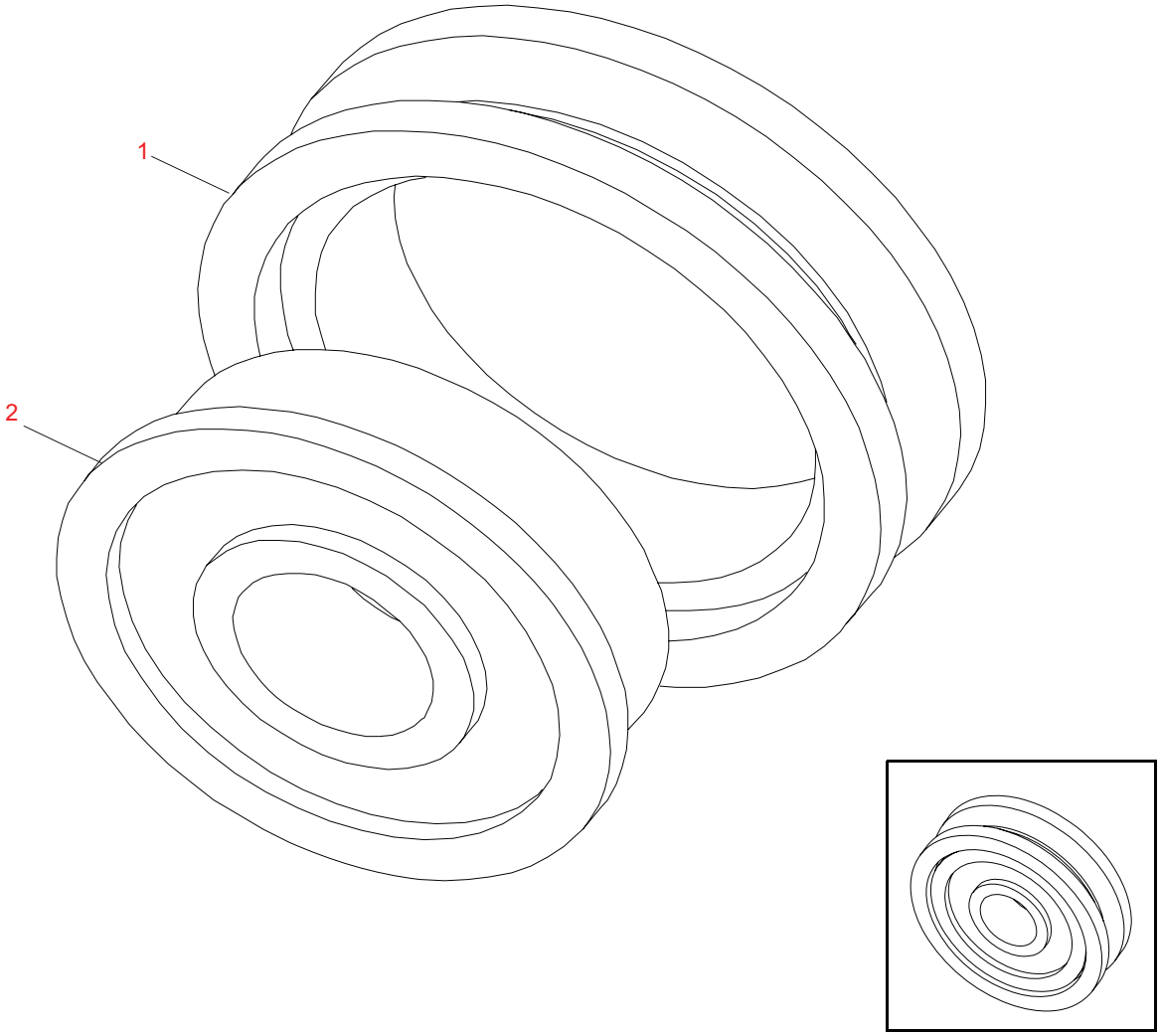


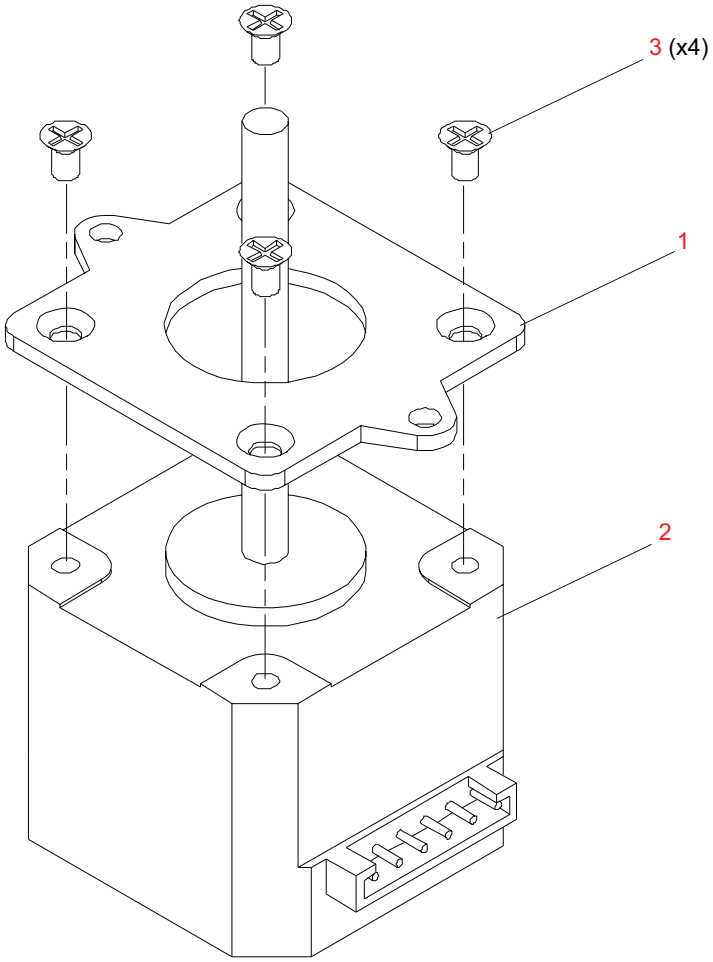
Figure 3-11: Shutter Rotate Roller Assembly

Long Shaft Motor Assembly

21.9678.0243 Rev 0

Refer to Figure 3-12

No.	Item	Qty.	UM.	Description
1	10.9678.0330	1	EA	PLATE, MOTOR ADAPTER
2	44.9678.0249	1	EA	MOTOR, STEPPER 42MM X 34MM 60MM SHAFT
3	53.6513.0002	4	EA	SCREW, 3MM X 5MM LG PFZ METRIC



Note orientation of adapter plate in relation to the motor.

Figure 3-12: Long Shaft Motor Assembly

Shutter Assembly

21.9678.1510 Rev J

Refer to Figure 3-13

No.	Item	Qty.	UM.	Description
1	10.9678.1526	2	EA	PIVOT, SHUTTER BLADE, SHORT
2	10.9678.1527	2	EA	PIVOT, SHUTTER BLADE, LONG
3	10.9678.1528	16	EA	CAM STOP
4	10.9678.1529	1	EA	CABLE CLAMP, SHUTTER
5	10.9678.1532	4	EA	GLIDE, BLADE PIVOT
6	10.9678.1534	8	EA	ACTUATOR ARM, BEARING, SHUTTER
7	10.9678.1535	1	EA	GLIDE SHEET, SHUTTER, BOTTOM
8	10.9678.1536	1	EA	GLIDE SHEET, SHUTTER, MIDDLE
9	10.9678.1537	4	EA	SPACER, SHUTTER BLADE
10	10.9678.1540	3	EA	BELT RING SECTOR
11	10.9678.1541	7	EA	BELT RING FLANGE SECTOR
12	10.9678.1542	1	EA	BELT RING FLANGE STOP
13	10.9678.1545	1	EA	BELT RING SECTOR, CLAMP
14	10.9678.1546	1	EA	BELT CLAMP
15	12.9678.1562	2	EA	BLADE, SHUTTER, BOTTOM, COATED
16	12.9678.1565	2	EA	BLADE, SHUTTER, TOP, COATED, PAINTED
17	21.9678.1515	1	EA	ASSY, SHUTTER MOTOR PLATE
18	53.2202.0004	6	EA	NUT, 4-40 HEX SS NYLON INSERT
19	53.6659.0003	2	EA	SCREW, 2-56 X 3/8" PPZ
20	53.6567.0001	16	EA	SCREW, 4-40 X 1/2" PPZ
21	53.6659.0005	4	EA	SCREW, 2-56 X 1/4" PFZ
22	53.6659.0014	16	EA	SCREW, 2-56 X 3/8" PFZ
23	53.6596.0001	8	EA	SCREW, 4-40 X 5/16" PPZ
24	53.6664.0001	8	EA	STANDOFF, 1/4" HEX 4-40 3/8" LG FF
25	53.6667.0004	16	EA	SCREW, 6-32 X 1/8" LG, SET, BLACK
26	54.1209.0004	8	EA	BEARING, 0.093" ID, 3/16" OD, FLANGED, SST
27	54.2064.0001	1	EA	TIMING BELT, MXL 330 GRV,.188" WD, KEVLAR
-	55.2186.0001	17	EA	CABLE TIE, 0.10" X 4", SMALL (**not shown**)

Shutter Assembly (continued)

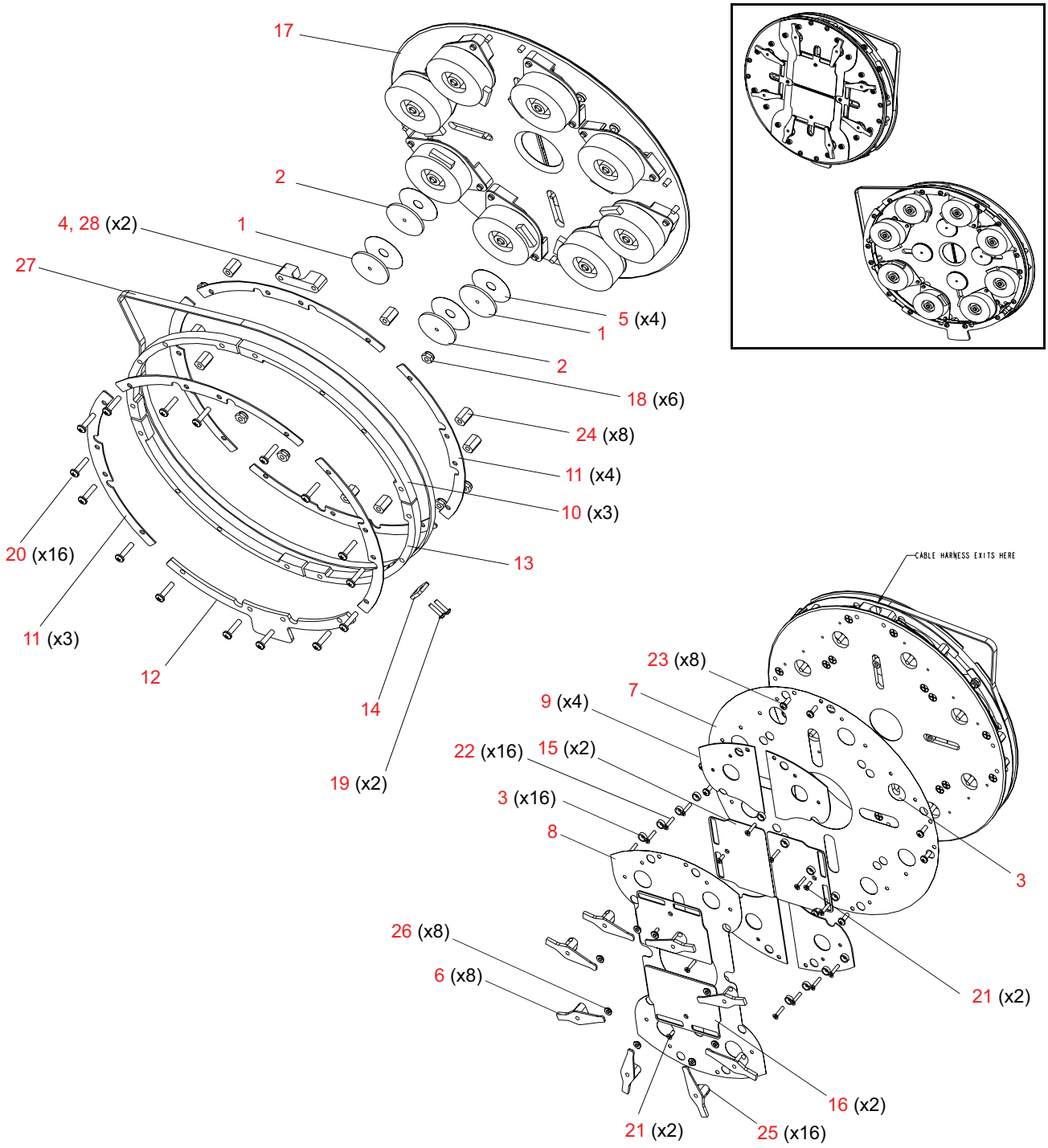


Figure 3-13: Shutter Assembly

Shutter Motor Disk Assembly

21.9678.1515 Rev E

Refer to Figure 3-14

No.	Item	Qty.	UM.	Description
1	10.9678.1560	1	EA	BASE PLATE, SHUTTER
2	44.9678.1517	8	EA	MOTOR, PANCAKE, SIZE 16,.47" SHAFT
3	53.2202.0030	4	EA	NUT, M3 X.5 HEX NYLOC ZINC
4	53.6513.0029	8	EA	SCREW, M3 X 12 PFZ
5	53.6513.0045	8	EA	SCREW, M3 X 16 PFZ
6	55.2178.0001	4	EA	CABLE ANCHOR, #8 SCREW MOUNT
7	55.2186.0001	10	EA	CABLE TIE,.10" X 4" SMALL
8	10.9678.1566	8	EA	SPACER, MOTOR MOUNT
9	25.9678.1717	1	EA	CABLE ASSEMBLY, SHUTTER DISK

Shutter Motor Disk Assembly (continued)

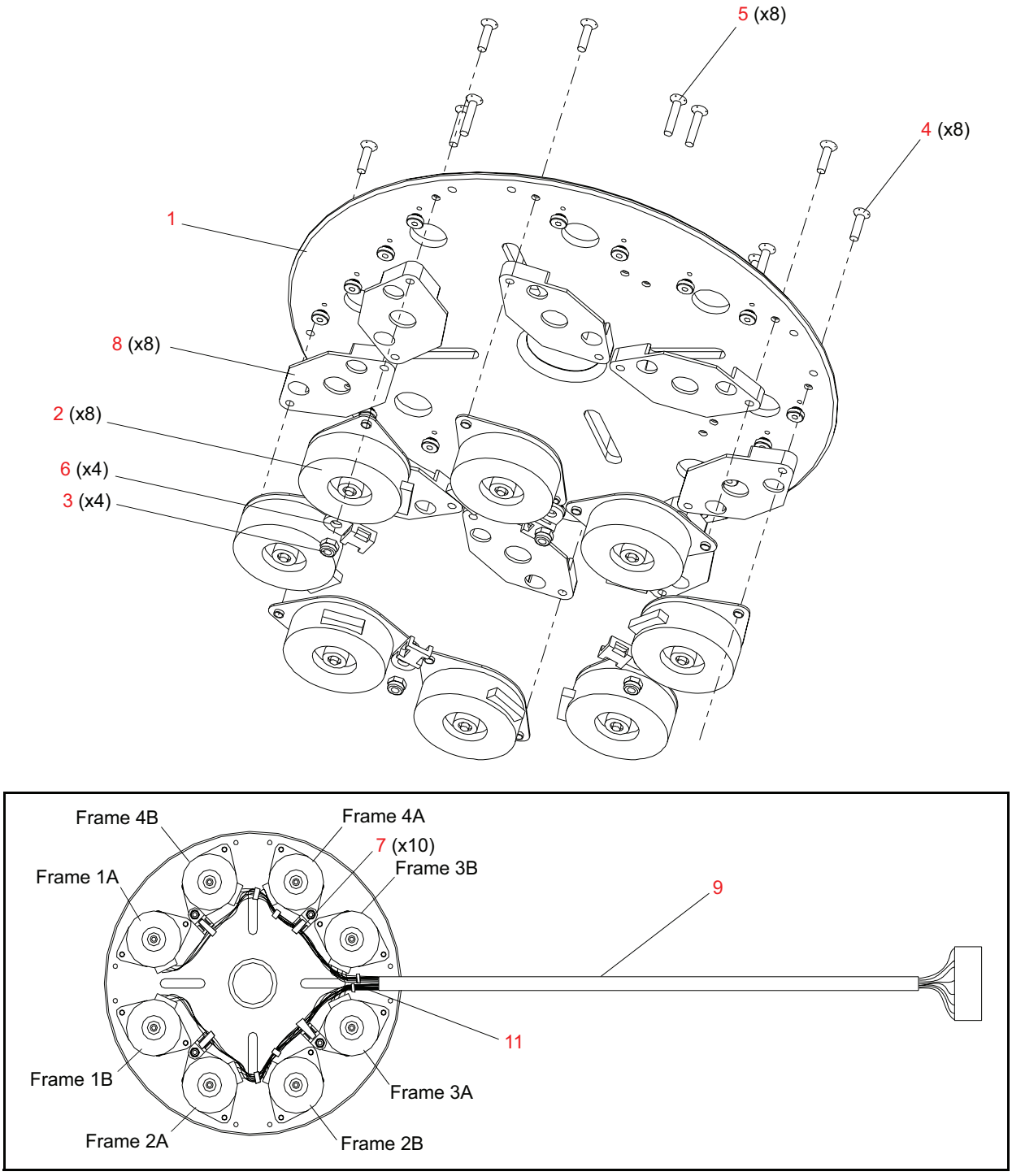


Figure 3-14: Shutter Motor Disk Assembly

Hot Box Assembly

21.9678.8698.01 Rev F

Refer to Figure 3-15

No.	Item	Qty.	UM.	Description
1	10.9678.0043.03	1	EA	LABEL PLATE, VL3000 BACKCAP, BLACK
2	10.9678.0641	1	EA	HOT BOX
3	10.9686.0642	1	EA	BACKCAP PLATE
4	10.9678.0643	1	EA	LAMP ADJUST STOP
5	10.9678.0645	3	EA	KNOB, LAMP ADJ MOLDED
6	10.9678.0646	1	EA	TILT PLATE, XYZ ADJUSTMENT
7	10.9678.1648	4	EA	GASKET, PRIMARY REFLECTOR
8	10.9678.2647	4	EA	CLAMP, PRIMARY REFLECTOR
9	12.9678.7151	1	EA	REFLECTOR, PRI 40 LUNE DUAL CURVATURE
-	25.9661.1522	1	EA	CABLE ASSY, HEAD TO BACKCAP GROUND (**Not Shown**)
-	25.9678.0789	1	EA	CABLE ASSY, IGNITOR TO LAMP SOCKET (**Not Shown**)
10	53.2030.0001	3	EA	NUT, ACORN 10-32THD 3/8 WIDE, 3/16 THD DP BLK ZINC
11	53.5508.0375	2	EA	SCREW, 8-32 X 3/8" PPSS
12	53.6530.0013	8	EA	RIVET, 1/8"OD.063" -.125"GL CSK HD ALUM
13	53.6582.0001	4	EA	SCREW, 6-32 X 3/4" PFZ
14	55.2233.0003	4	EA	RETAINER, PUSH-ON TYPE
15	55.2233.0006	4	EA	STUD, 1/4 TURN OPR.455L STEEL
16	55.6546.0004	3	EA	WASHER, TEFLON,.201ID X.438O
17	55.6568.0077	7	EA	SPRING, CPRSN.300"OD.625"LG.035"WIRE DIA SS
18	55.6759.0003	4	EA	STANDOFF, PEM 6-32 X.562 LG, SST
19	71.2561.0002	1	EA	LAMPHOLDER, SFC10-4 WITH PREFOCUS, SHARX (changed 12-06-06)

Hot Box Assembly (continued)

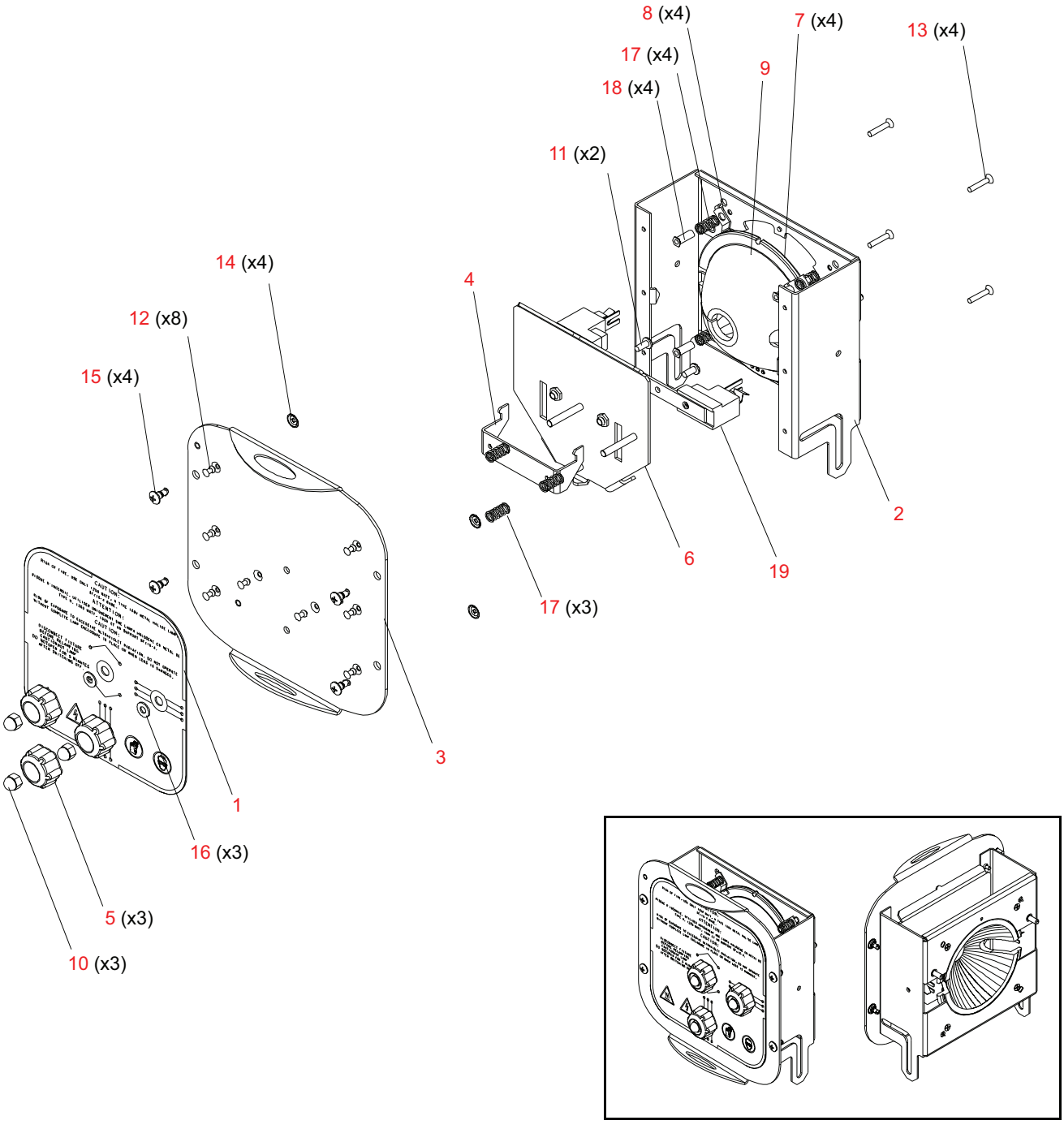


Figure 3-15: Hot Box Assembly

Dual Fan Tray Duct (Standard) Assembly

21.9678.0660.03 Rev B (VL3500 Only)

Refer to Figure 3-16

No.	Item	Qty.	UM.	Description
1	10.9678.0665	1	EA	SPRING, EXTENSION ELONGATED HOOKS
2	22.9678.0661	1	EA	ASSY, FAN TRAY
3	22.9678.1265	1	EA	DUCT ASSY, SHUTTER/GOBO
4	23.9678.0684	2	EA	FAN ASSY, HEAD FRONT
5	53.5506.1375	6	EA	SCREW, 6-32 X 1 3/8"LG PPB
6	53.6519.0001	2	EA	SCREW, 4-40 X 5/8" PPZ
7	53.6530.0006	2	EA	RIVET, 1/8"OD POP.188-.250GL
8	55.6538.0002	2	EA	WASHER, #6 NYLON NATURAL
9	55.6818.0002	1	EA	STANDOFF, 45 DEG NYLON 6/6 KUR
10	74.1099.0001	1	EA	SWITCH, MINIATURE 5AMP 150DEG

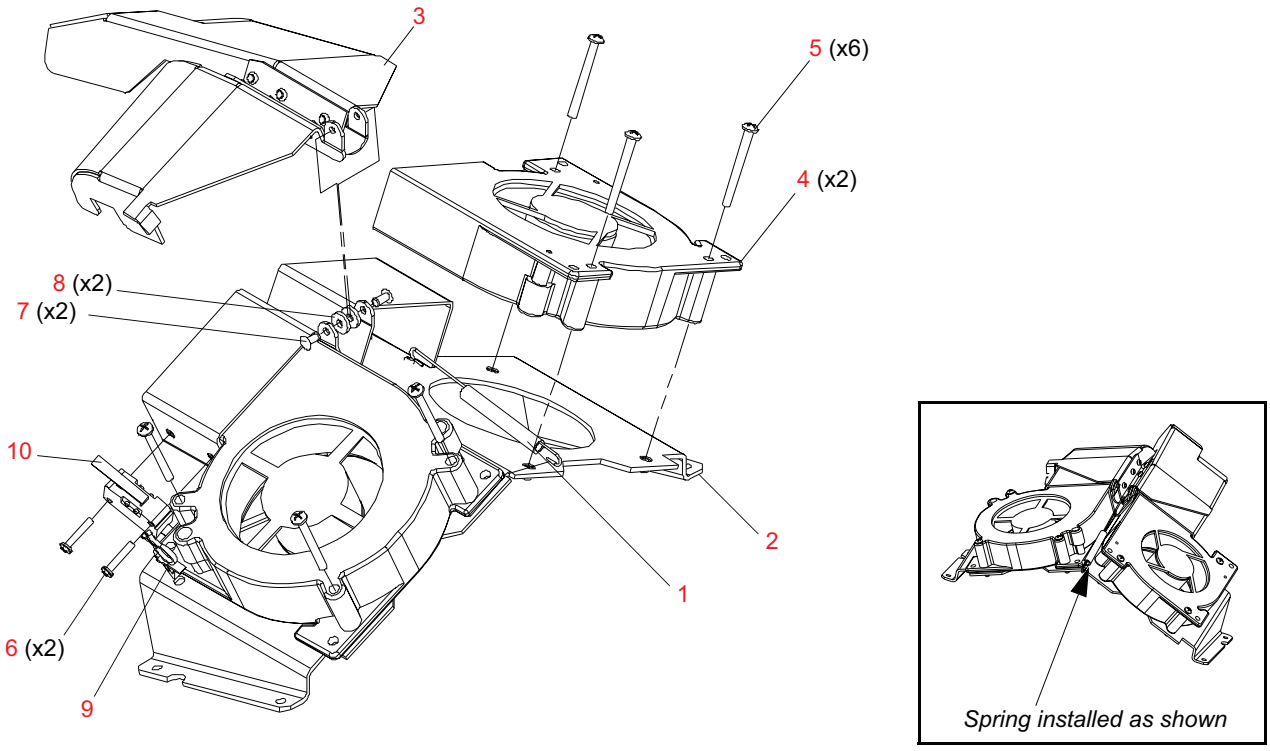


Figure 3-16: Dual Fan Tray Duct (Standard) Assembly - VL3500 Only

Dual Fan Tray Duct (Quiet) Assembly

21.9678.0659.03 Rev D (VL3500Q Only)

Refer to Figure 3-17

No.	Item	Qty.	UM.	Description
1	10.9678.0665	1	EA	SPRING, EXTENSION ELONGATED HO
2	22.9678.0661	1	EA	ASSY, FAN TRAY
3	22.9678.1265	1	EA	DUCT ASSY, SHUTTER/GOBO
4	23.9678.0699	2	EA	FAN ASSY, HEAD FRONT
5	53.5506.1375	6	EA	SCREW, 6-32 X 1 3/8"LG PPB
6	53.6519.0001	2	EA	SCREW, 4-40 X 5/8" PPZ
7	53.6530.0006	2	EA	RIVET, 1/8"OD POP.188-.250GL
8	55.2179.0003	2	EA	SADDLE, CABLE,.75" X.75", 4-WAY ADH BACK WHITE
9	55.2186.0001	2	EA	CABLE TIE,.10" WD, 4.00" LG SMALL (**not shown**)
10	55.6538.0002	2	EA	WASHER, #6 NYLON NATURAL
11	55.6818.0002	1	EA	STANDOFF, 45 DEG NYLON 6/6 KUR
12	74.1099.0001	1	EA	SWITCH, MINIATURE 5AMP 150DEG

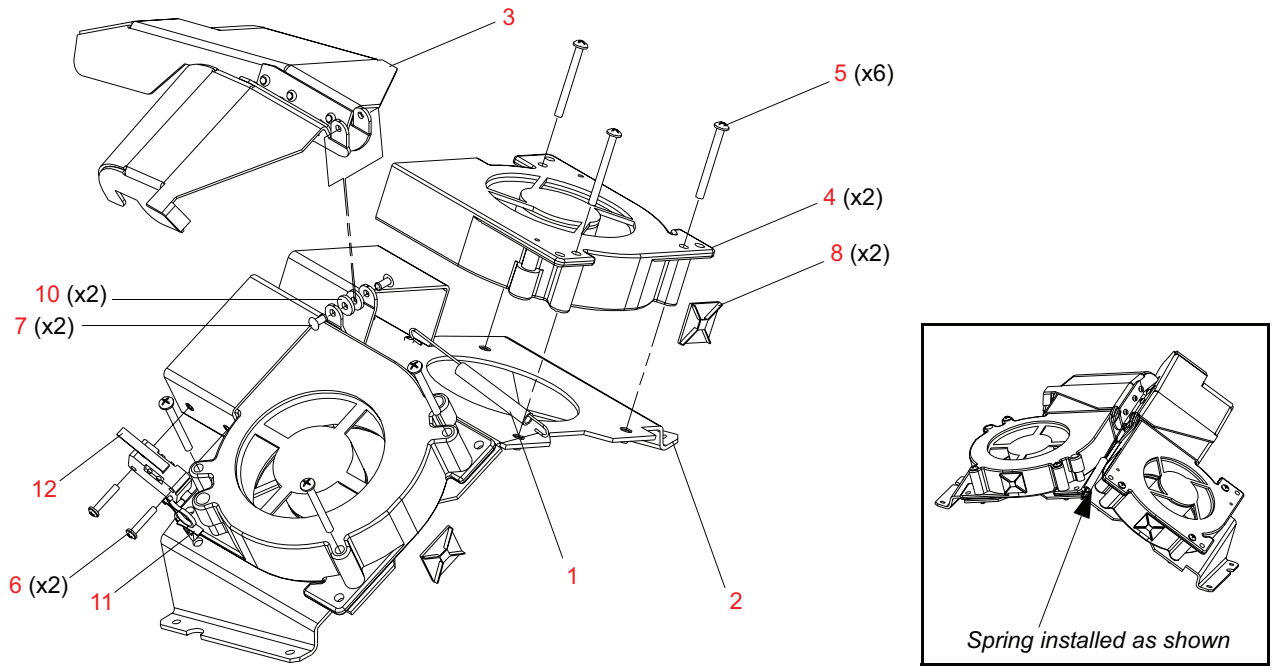


Figure 3-17: Dual Fan Tray Duct (Quiet) Assembly - VL3500Q Only

Head Front Fan (Standard) Assembly

23.9678.0684 Rev 0 (VL3500 Only)

Refer to Figure 3-18

No.	Item	Qty.	UM.	Description
1	40.7125.0001	1	EA	FAN, 24V FAL6F24LH
2	52.6523.0002	1	EA	CONN, HOUSING 2POS PLUG SHROUDED WIRE TO WIRE
3	52.8347.0001	2	EA	CONTACT, 24-30AWG MALE CRIMP

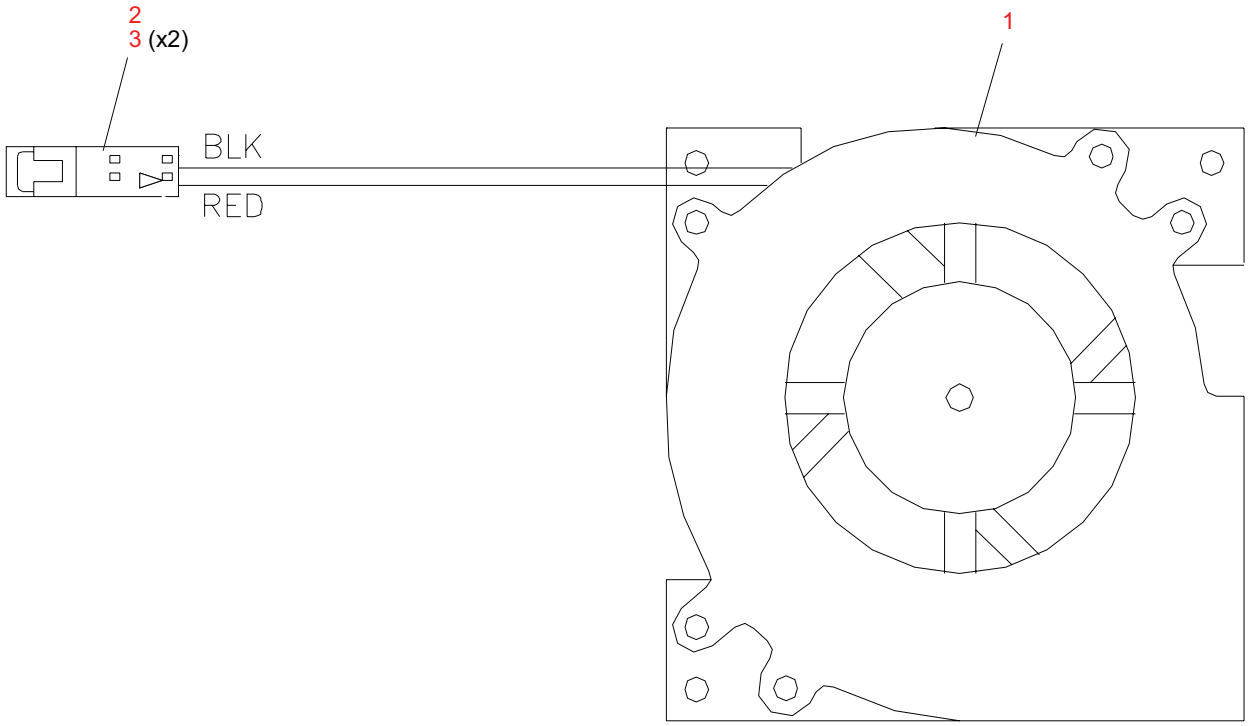


Figure 3-18: Head Front Fan Assembly - VL3500 Only

Head Front Fan (Quiet) Assembly

23.9678.0699 Rev A (VL3500Q Only)

Refer to Figure 3-19

No.	Item	Qty.	UM.	Description
1	40.7125.0001	1	EA	FAN, 24V FAL6F24LH
2	52.6523.0002	1	EA	CONN, HOUSING 2POS PLUG SHROUDED WIRE TO WIRE
3	52.8347.0001	2	EA	CONTACT, 24-30AWG MALE CRIMP
4	55.2186.0001	1	EA	CABLE TIE,.10 X 4" SMALL
5	55.2268.0125	1	EA	HEAT SHRINK, 1/8" CLEAR KYNAR UL 600V 150 DEG C
6	60.8440.6801	1	EA	RESISTOR, 10W, 5%, 68 OHM WIREWOUND

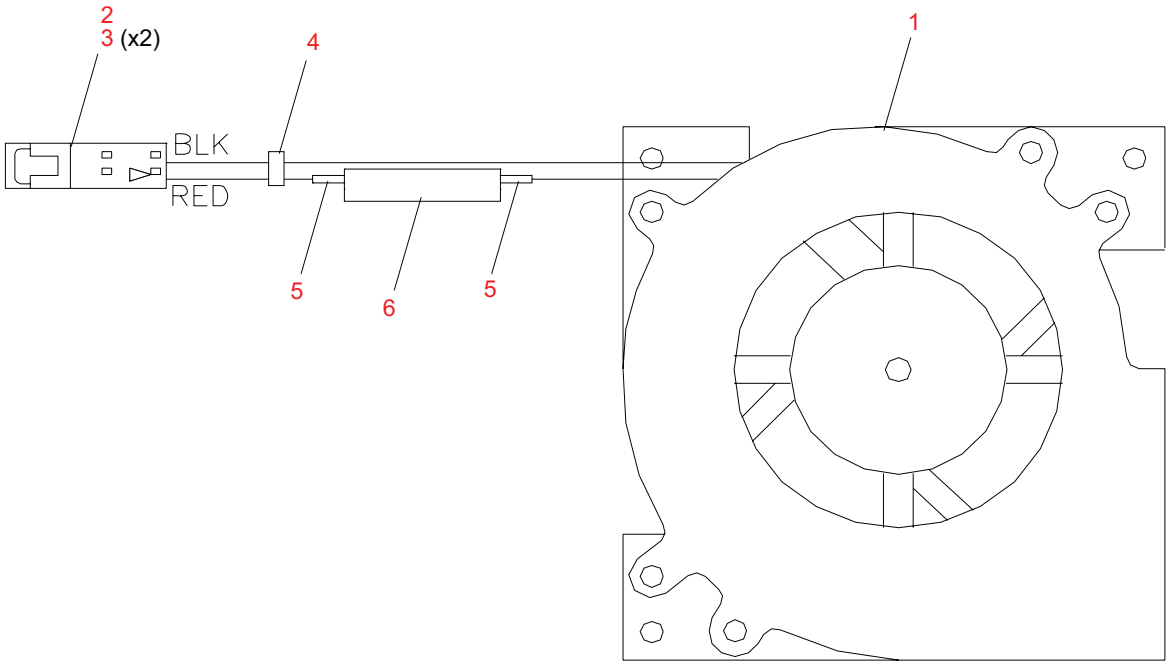


Figure 3-19: Head Front Fan Assembly - VL3500Q Only

Transfer Fan Assembly

21.9678.1263 Rev 0

Refer to Figure 3-20

No.	Item	Qty.	UM.	Description
1	10.9678.0679	1	EA	TRANSFER FAN TRAY
2	22.9678.1280	1	EA	SHIELD ASSY, SHUTTER ROTATE HARNESS
3	23.9678.0695	1	EA	ASSY, TRANSFER FAN
4	53.6558.0001	1	EA	SCREW, 6-32 X.375" LG PPZ
5	53.6571.0003	3	EA	SCREW, 6-32 X 1.500" LG PPB
6	55.2179.0001	1	EA	CABLE ANCHOR, #6 SCREW MOUNT
-	55.2186.0001	2	EA	CABLE TIE,.10" WD, 4" LG, SMALL (**not shown**)
7	55.6543.0001	2.12	IN	GROMMET STRIP, SERRATED POLYETHYLENE
8	55.6769.0004	2	EA	TWIST-LOK 0.55" ID NOM WHT 85 C MAX FLAME RET

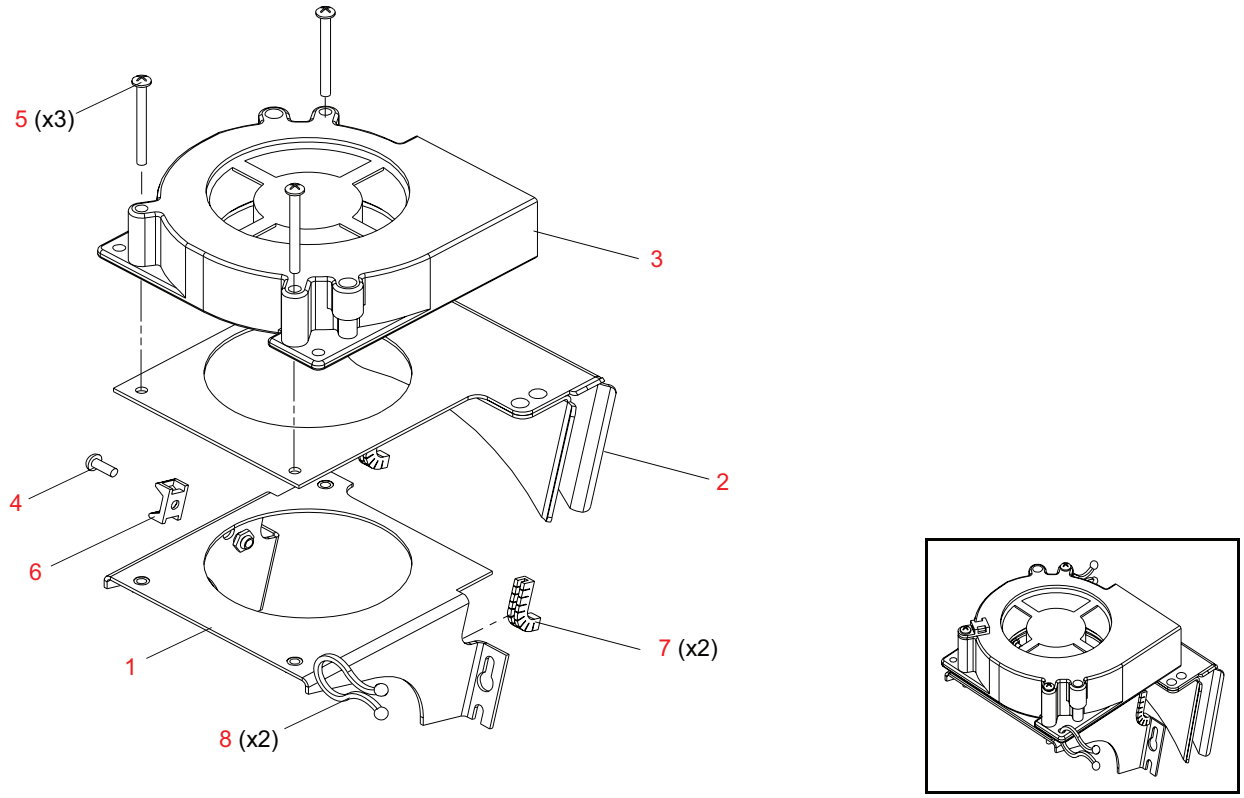


Figure 3-20: Transfer Fan Assembly

Notes

Spot Optic Assembly

22.9678.0103 Rev S

Refer to Figure 3-21 and Figure 3-22

No.	Item	Qty.	UM.	Description
1	10.9678.1131	1	EA	FORWARD PULLEY SHAFT (changed 12-15-04)
2	10.9678.0127	1	EA	PULLEY, IDLER
3	10.9678.0129	2	EA	SPACER, ROLLER CAM
4	10.9678.0153	1	EA	CABLE CLAMP, CAST
5	10.9678.0156	2	EA	BARREL STRAP, G1 & G2
6	10.9678.0157	1	EA	BARREL STRAP, G3
7	10.9678.0171	1	EA	SHAFT, CAM PULLEY
8	10.9678.1185	1	EA	LIGHT BAFFLE #2
9	10.9678.1186	1	EA	LIGHT BAFFLE #3
10	10.9678.1191	1	EA	LIGHT BAFFLE, G3
11	12.9678.1174	1	EA	LENS MOUNT, MACHINE G3
12	12.9678.1179.01	1	EA	LENS MOUNT, MACHINE G1
13	12.9678.1179.02	1	EA	LENS MOUNT, MACHINE G2
14	21.9678.0110	1	EA	ASSY, ZOOM BOX
15	21.9678.0113	1	EA	ASSY, RAIL & CARRIAGE
16	22.9678.1181	1	EA	LENS ASSY, GROUP 1
17	22.9678.0182	1	EA	LENS ASSY, GROUP 2
18	22.9678.0183	1	EA	LENS ASSY, GROUP 3
19	22.9678.0199	1	EA	ASSY, LENS MOUNT G4
20	22.9678.1103	1	EA	ASSY, EDGE BEARING RIGHT
21	22.9678.1105	1	EA	ASSY, EDGE BEARING LEFT
22	22.9678.1106	1	EA	ZOOM CAM ASSY
23	22.9678.1113	1	EA	ASSY, ZOOM MOTOR TENSIONING
24	22.9678.1115	1	EA	INTERCONNECT, LIGHT SHIELD
25	22.9678.1190	1	EA	LID ASSY, ZOOM BOX (changed 11-05-03)
	- 12.9678.1189	1	EA	LID, ZOOM BOX
	- 53.2008.0006	1	EA	NUT, PUSH #6
	- 53.6522.0001	1	EA	SCREW, 6-32 X 1/4" PPZ
	- 55.3303.0006	1	EA	WASHER, #6 LOCK INT. TOOTH SS

No.	Item	Qty.	UM.	Description
26	23.9678.1120	1	EA	LINEAR ACTUATOR ASSEMBLY
	- 44.9678.0119	1	EA	LINEAR ACTUATOR EDGE DRIVE
	- 52.6467.0004	1	EA	4 POS 30-24 AWG CRIMP PHR
	- 52.6467.0024	4	EA	CONTACT, SOCKET 30-24AWG CRIMP (REEL) PH (JST)
27	24.9678.3112	1	EA	PCB ASSY, VL3000 ZOOM SENSOR
28	53.2004.0002	1	EA	NUT, 8-32 KEPS ZINC PLATE
29	53.2213.0001	7	EA	NUT, #6 KEPS (changed 03-24-04)
30	53.5564.0250	2	EA	SCREW, 6-32 X 1/4" PFB UNDERCUT (added 04-07-06)
31	53.5604.0375	5	EA	SCREW, 4-40 X 3/8" PPB (changed 03-24-04)
32	53.6513.0023	6	EA	SCREW, M3 X 8MM LG PFZ METR
33	53.6558.0009	17	EA	SCREW, 6-32 X 3/8" SEMS (changed 03-24-04)
34	53.6558.0016	1	EA	SCREW, 6-32 X 3/4" LG PPS SEMS (changed 3-03-04)
35	53.6596.0002	4	EA	SCREW, 4-40 X 5/16" LG PPZ SEMS (changed 3-03-04)
36	53.6609.0001	6	EA	SCREW, 6-32 X 3/8" PFZ
37	53.6613.0008	4	EA	SCREW, 6-32 X 1/2" LG PPZ SEMS (added 3-03-04)
38	53.6614.0003	2	EA	SCREW, 6-32 X 5/8" PFZ
39	53.6617.0003	1	EA	SCREW, 6-32 X 1" PPB SEMS (changed 3-03-04)
40	53.6682.0025	2	EA	SCREW, 8-32 X 5/8" LNG PPZ SEMS (changed 11-19-03)
41	54.1261.0001	6	EA	BUSHING, LOW DAMP THERMOPLASTIC .189" ID .5" OD
42	55.2234.0001	1	EA	RING, RETAINING E-STYLE GRV.188 DIA (changed 02-06-05)
43	54.2053.0001	1	EA	MXT T BELT PULLEY, 20GRV .25WD
44	54.2054.0001	1	EA	BELT, TIMING MXL .080 PITCH 235 G, 3/16" WIDE, POLYU/KEVLAR
45	54.1262.0001	2	EA	BEARING, FLANGED EXTENDED .1875 BORE (changed 12-15-04)
46	55.2283.0001	2	EA	SHIM, SPACER .253" IDX, .010" THK
47	55.6503.0004	3	EA	WASHER, #8 FLAT ZINC (changed 03-24-04)
48	55.6528.0001	5	EA	WASHER, #6 FLAT ZINC
49	55.6578.0073	1	EA	SPRING, EXTSN .375"OD
50	55.6846.0001	2	EA	CAM FOLLOWER, 3MM DIA STUD
51	10.9678.1140	1	EA	SHOCK PAD, G1 (added 12-15-04)
52	10.9678.1141	1	EA	BACKING PLATE, SHOCK PAD, G1 (added 12-15-04)

Spot Optic Assembly (continued)

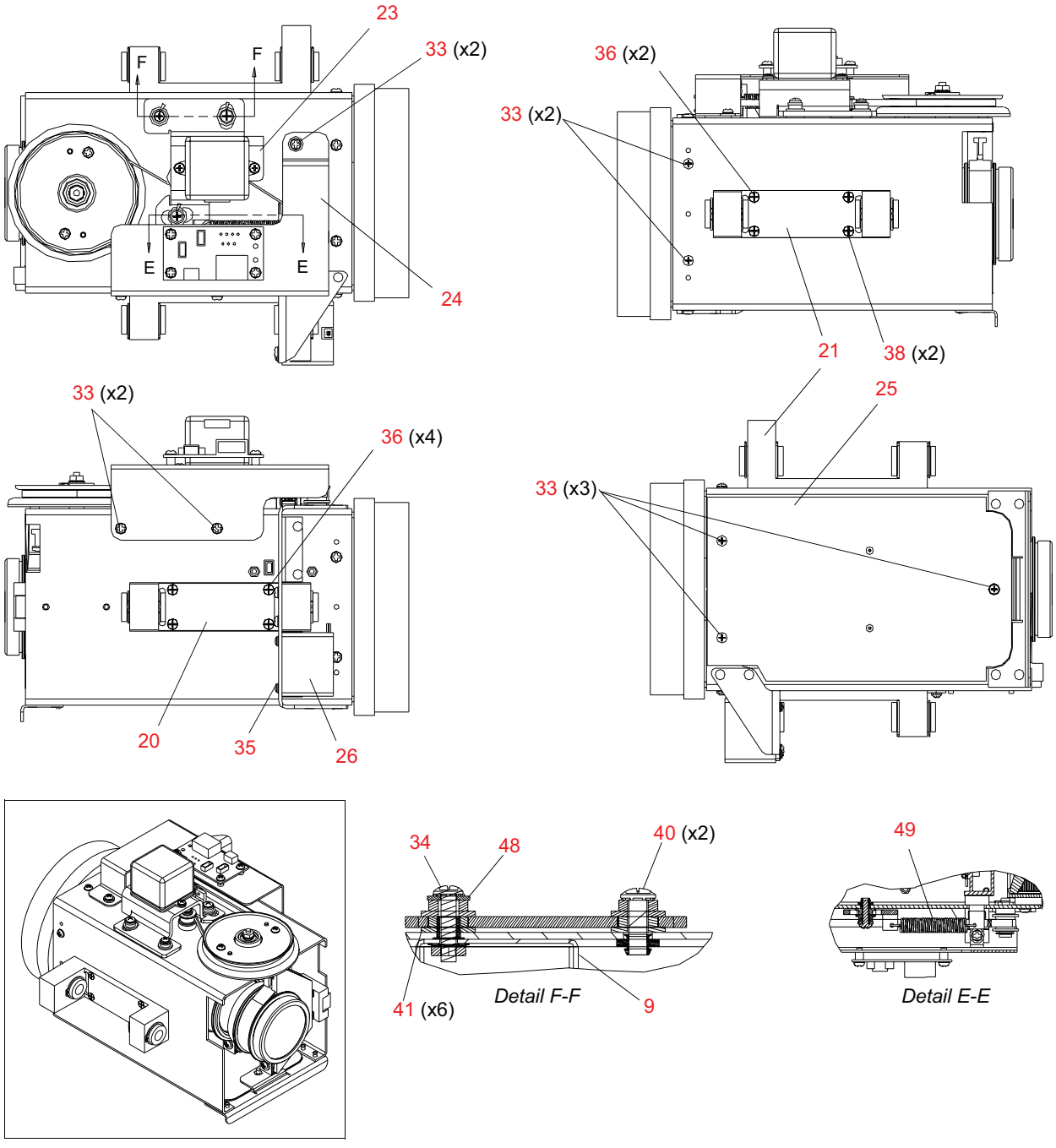


Figure 3-21: Spot Optic Assembly View 1

Spot Optic Assembly (continued)

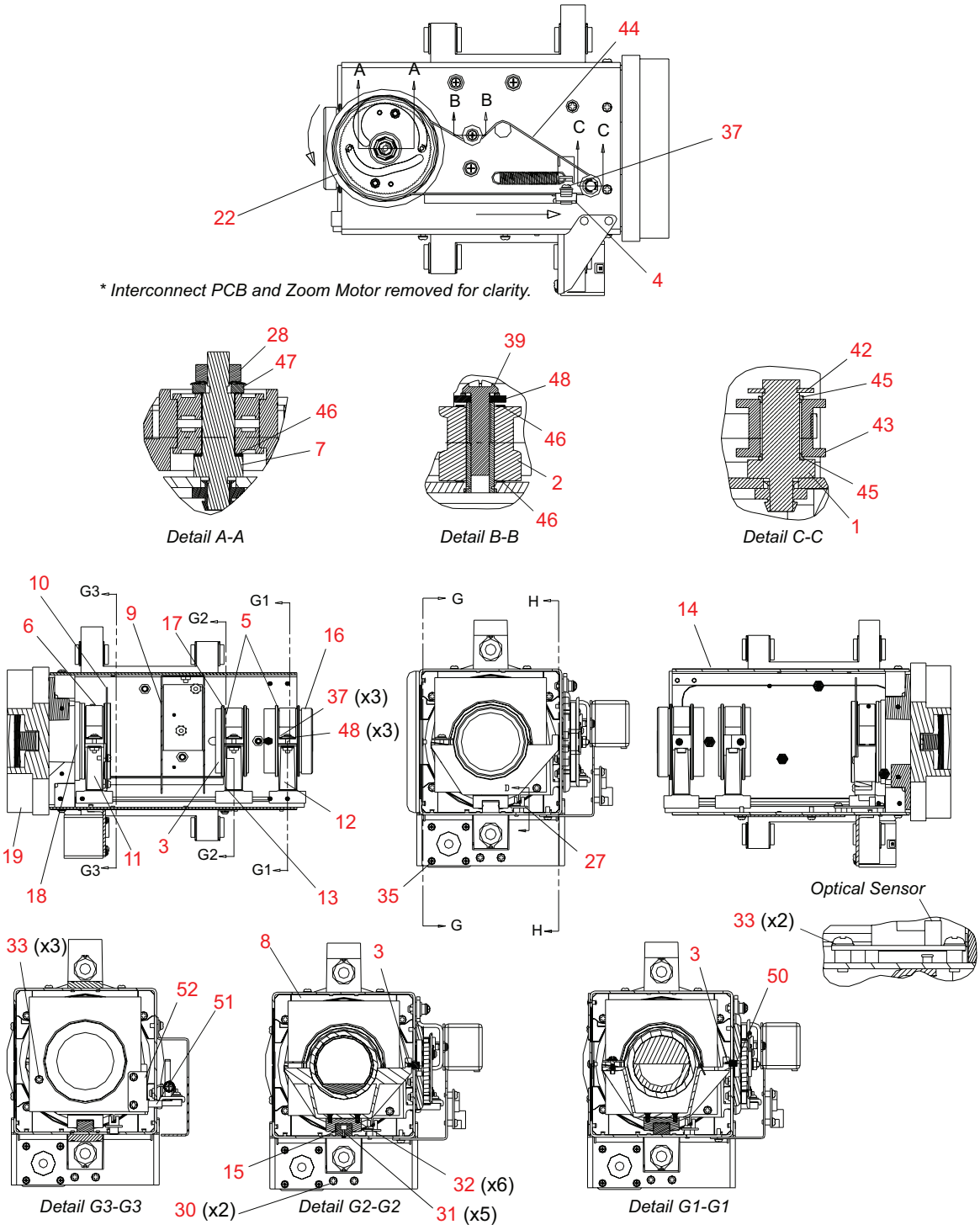


Figure 3-22: Spot Optic Assembly View 2

Group 4 Lens Assembly

22.9678.0199 Rev 0

Refer to Figure 3-23

No.	Item	Qty.	UM.	Description
1	12.9678.0198	2	EA	RING BLOCK, MACHINED G4
2	22.9678.0174	1	EA	LENS ASSY, GROUP 4
3	53.6558.0001	4	EA	SCREW, 6-32 X 3/8" PPZ
4	55.3303.0006	4	EA	WASHER, #6 LOCK INT.TOOTH SS
5	55.6763.0500	4	EA	PIN, DOWEL 0.5" LG 0.125" DIA 303SS

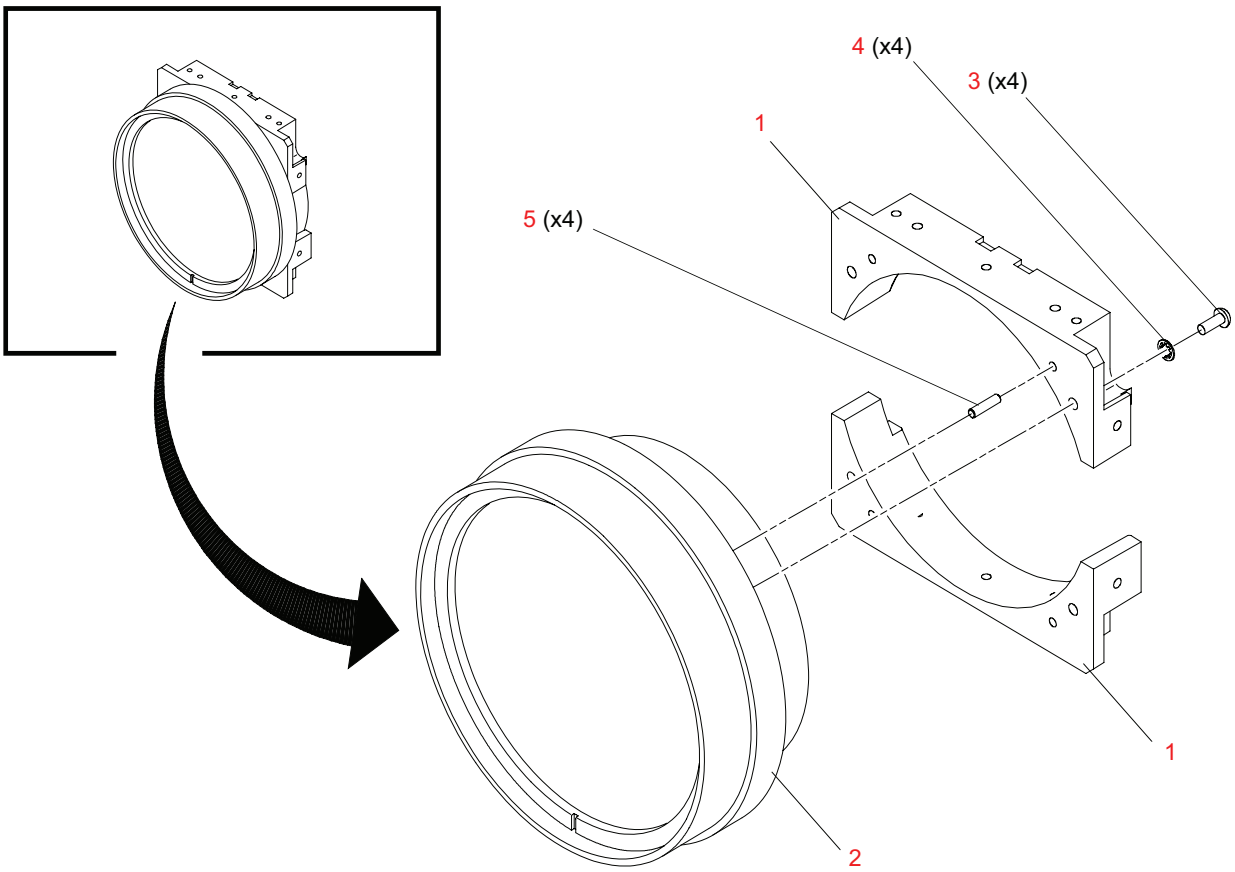


Figure 3-23: G4 Lens Mount Assembly

Right Edge Bearing Assembly

22.9678.1103 Rev C

Refer to Figure 3-24

No.	Item	Qty.	UM.	Description
1	12.9678.1102	1	EA	EDGE BEARING, MACHINED RIGHT
2	54.2056.0001	4	EA	RING, RETAINING EXTERNAL 19MM
3	55.6776.0010	2	EA	LINEAR BUSHING, 10MM STEEL W/PHENOLIC CAGE

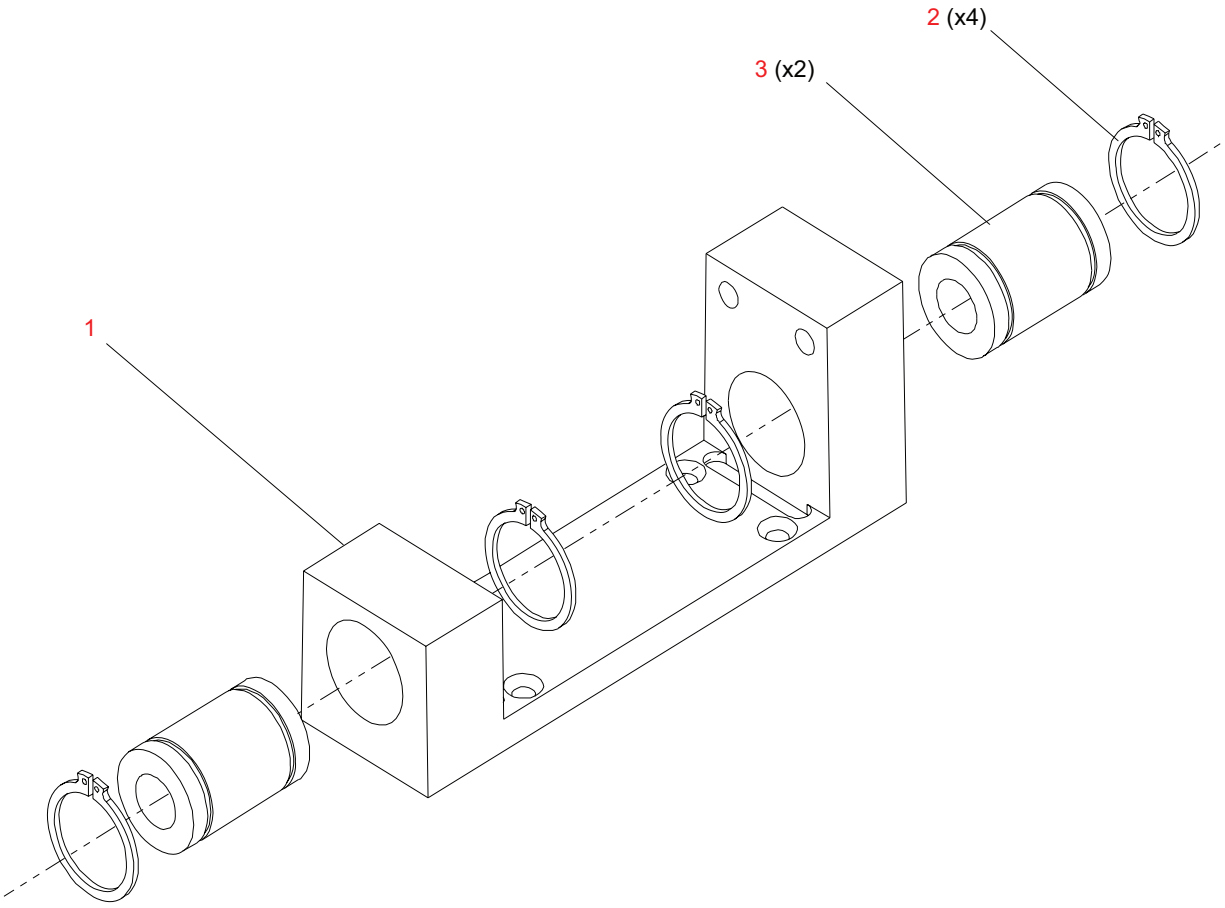


Figure 3-24: Right Edge Bearing Assembly

Left Edge Bearing Assembly

22.9678.1105 Rev C

Refer to Figure 3-25

No.	Item	Qty.	UM.	Description
1	12.9678.1104	1	EA	EDGE BEARING, MACHINE LEFT
2	54.2056.0001	4	EA	RING, RETAINING EXTERNAL 19MM
3	55.6776.0010	2	EA	LINEAR BUSHING, 10MM STEEL W/PHENOLIC CAGE

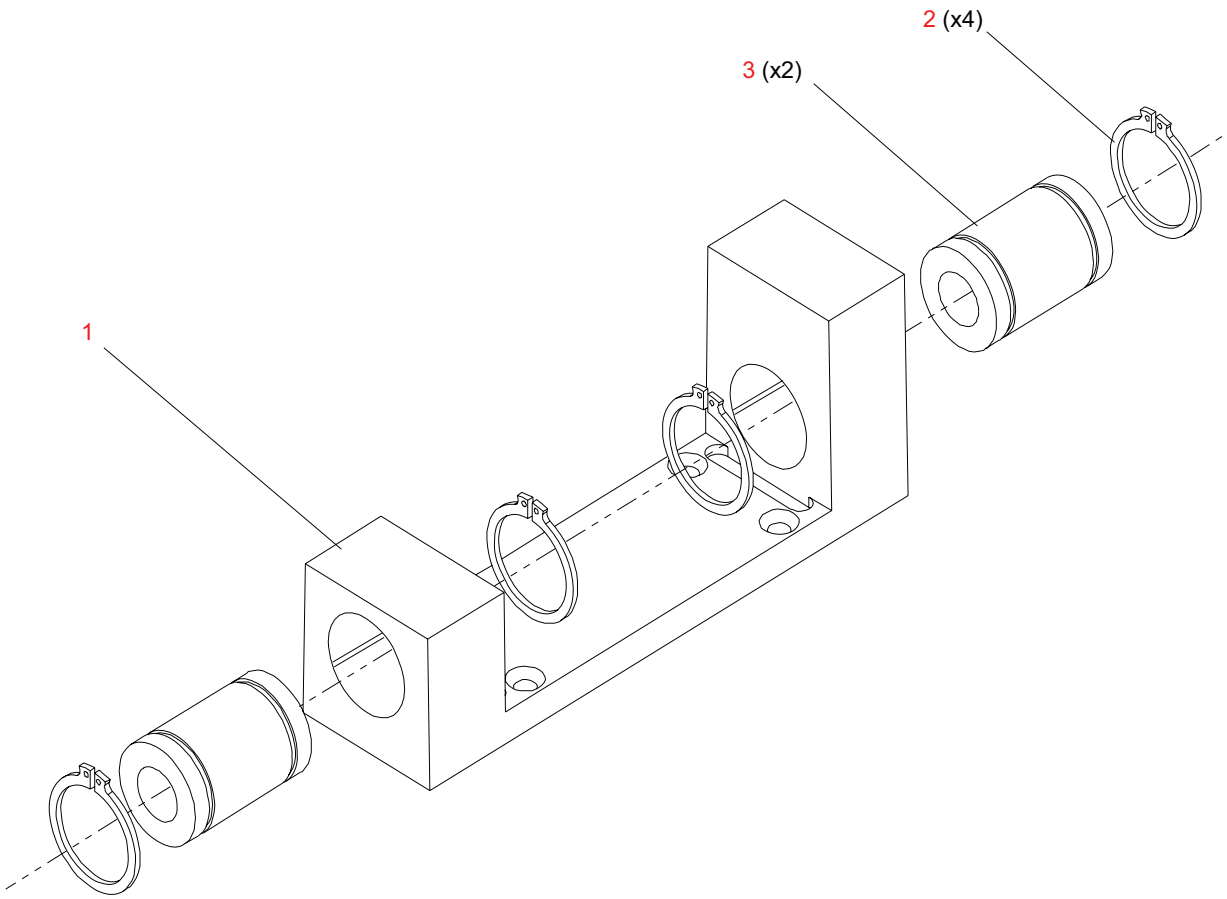


Figure 3-25: Left Edge Bearing Assembly

Zoom Cam Assembly

22.9678.1106 Rev B

Refer to Figure 3-26

No.	Item	Qty.	UM.	Description
1	10.9678.1107	1	EA	ZOOM TIMING CAM
2	10.9678.1108	1	EA	PULLEY FLANGE
3	10.9678.1118	1	EA	TIMING PULLEY, ZOOM
4	53.6613.0008	2	EA	SCREW, 6-32 X 1/2" PPZ (changed 11-08-04)
5	54.1259.0004	2	EA	BEARING, RADIAL FLANGED .25"ID .625"OD (changed 06-25-03)
6	55.6763.0500	2	EA	PIN, DOWEL .5"LG .125"DIA 303SS

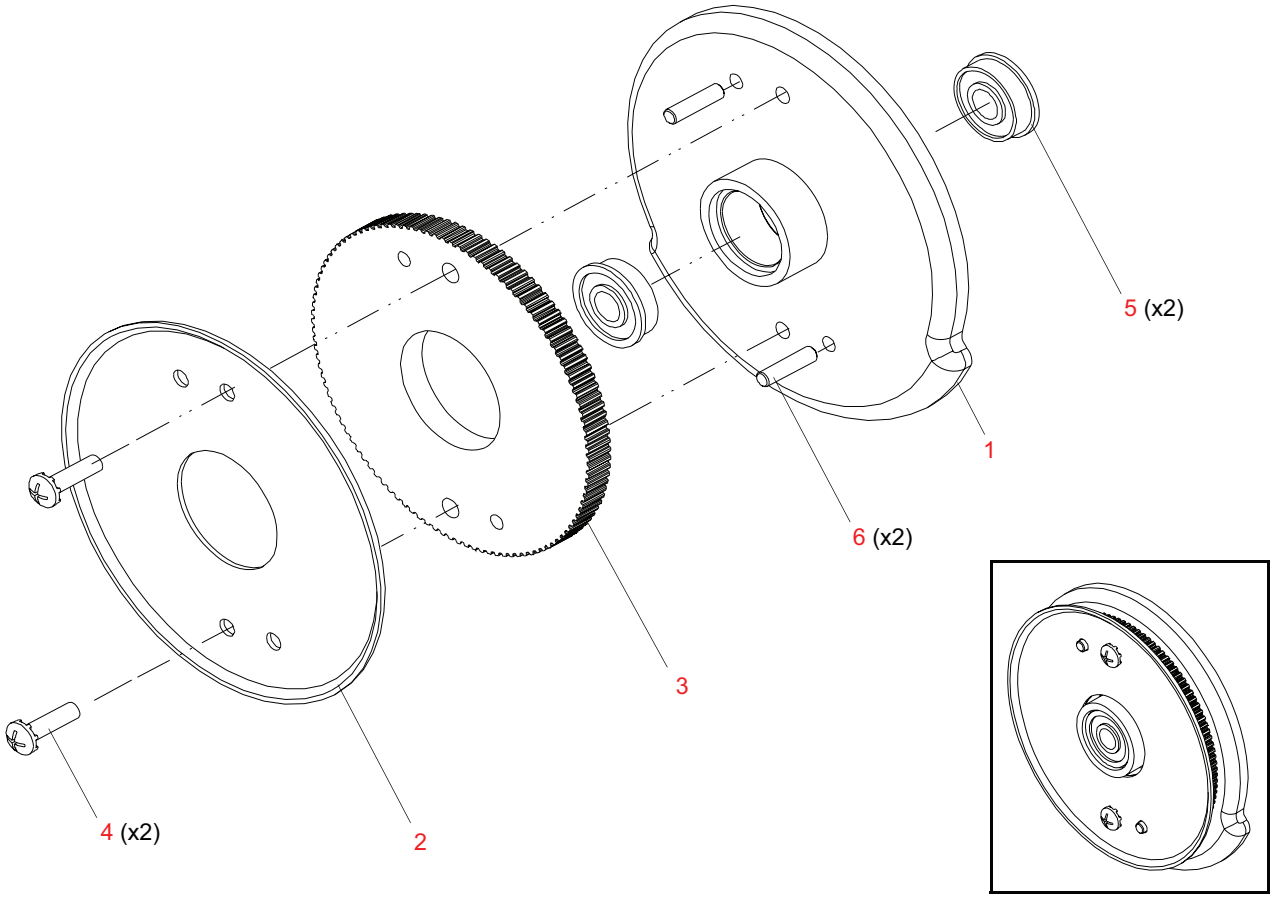


Figure 3-26: Zoom Cam Assembly

Zoom Motor Tensioning Assembly

22.9678.1113 Rev B

Refer to Figure 3-27

No.	Item	Qty.	UM.	Description
1	10.9678.0338	1	EA	PULLEY, ZOOM MOTOR
2	10.9678.1111	1	EA	BRACKET, ZOOM TENSION SHEETMETAL
3	44.9663.1326	1	EA	MOTOR, 17 .53" SHAFT 11.8MH 5.5 OHM
4	53.5559.0250	2	EA	SCREW, 6-32 X 1/4" SET CONE POINT
5	53.6522.0001	2	EA	SCREW, 6-32 X 1/4" PPZ
6	55.3303.0006	2	EA	WASHER, #6 LOCK INT.TOOTH SS

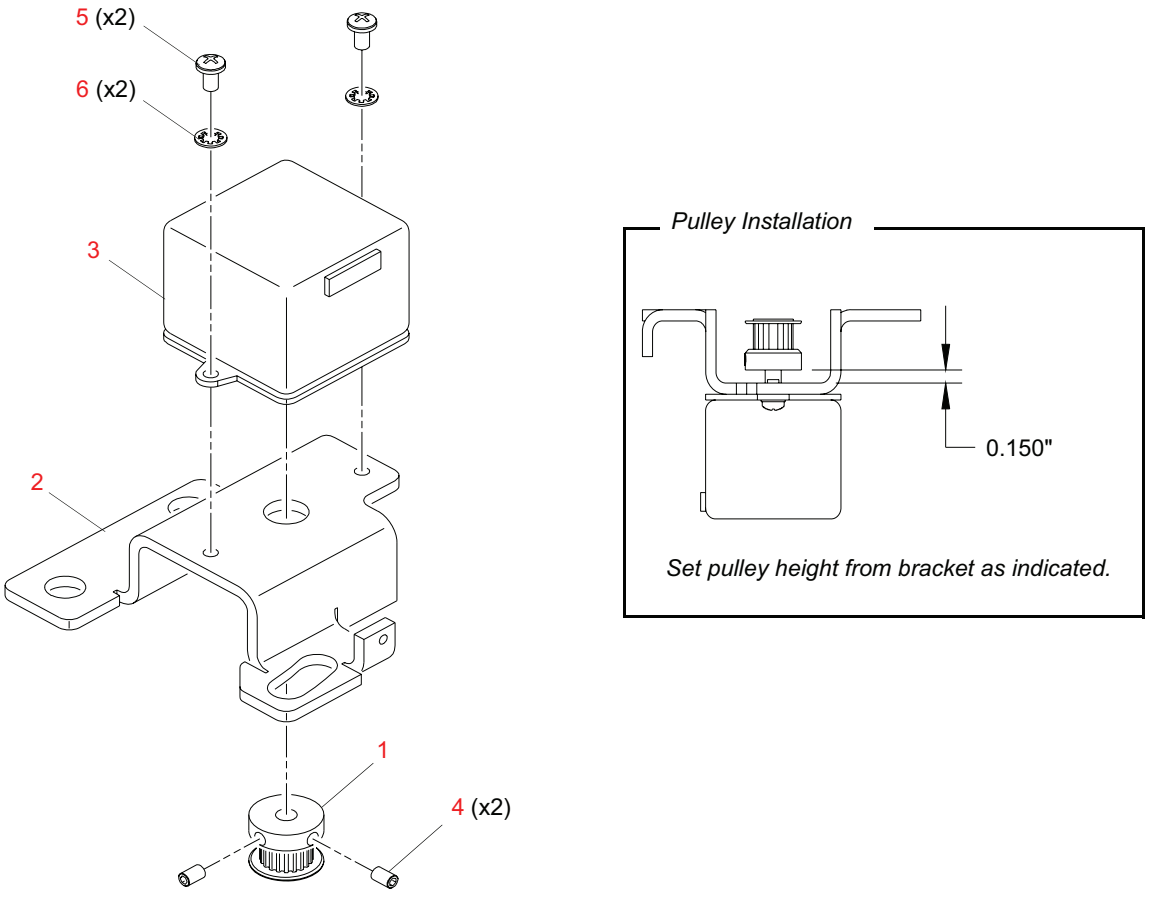


Figure 3-27: Zoom Motor Tensioning Assembly

Interconnect Light Shield Assembly

22.9678.1115 Rev D

Refer to Figure 3-28

No.	Item	Qty.	UM.	Description
1	10.9678.1114	1	EA	SHIELD, INTERCONNECT MOUNT/LIGHT
2	24.9678.3116	1	EA	PCB ASSY, ZOOM INTERCONNECT
3	53.6558.0009	4	EA	SCREW, 6-32 X 3/8" PPZ SEMS

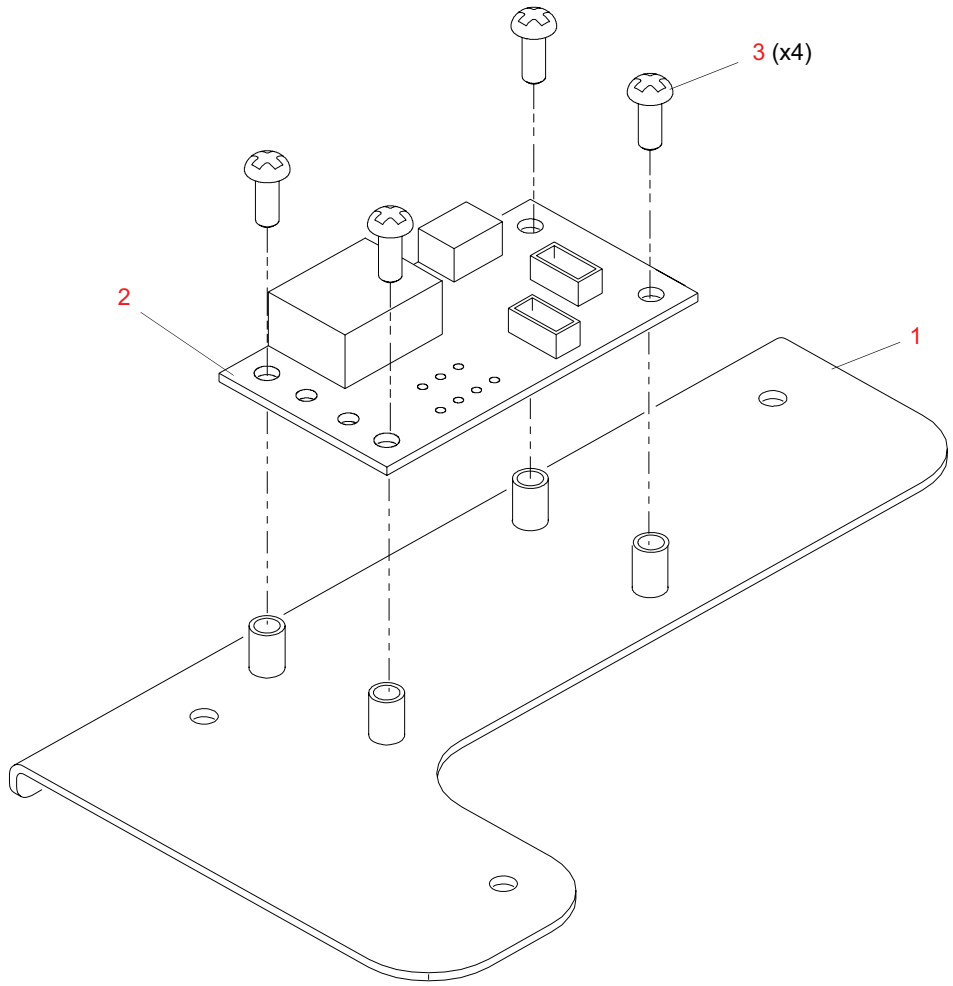


Figure 3-28: Interconnect Light Shield Assembly

Rod Clamp Assembly

22.9678.0149 Rev B

Refer to Figure 3-29

No.	Item	Qty.	UM.	Description
1	10.9678.0151	1	EA	CLAMP, OPTIC ROD CAST
2	53.2008.0006	2	EA	SPRING CLIP, 6-32
3	53.6616.0001	2	EA	SCREW, 6-32 X 3/4" PPZ
4	55.6528.0001	2	EA	WASHER, #6 FLAT ZINC
5	55.6538.0001	2	EA	WASHER, #6 LOCK INTERNAL TOOTH

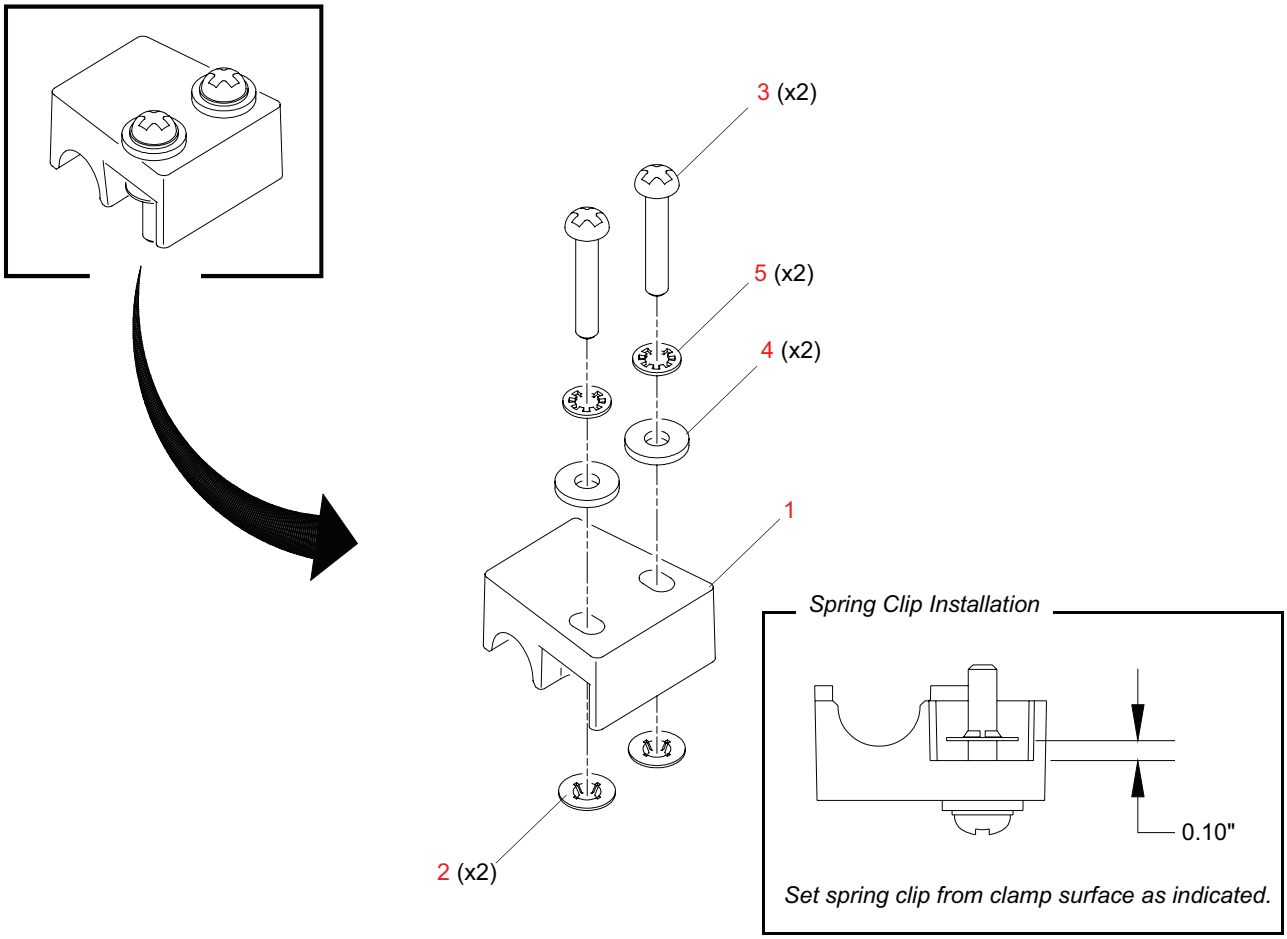


Figure 3-29: Rod Clamp Assembly

Color/Dimmer/Strobe Assembly

22.9678.0402 Rev N (VL3500)
22.9678.0462 Rev E (VL3500Q)

No.	Item	Qty.	UM.	Description
1	10.9678.0324	1	EA	PULLEY, FIXED COLOR WHEEL
2	10.9678.0337	1	EA	DRIVE PULLEY, FIXED COLOR WHEEL
3	10.9678.0456	4	EA	SHAFT, COLOR WHEEL
4	10.9678.0457.07	1	EA	SPACER, COLOR WHEEL L.357
5	10.9678.0457.02	2	EA	SPACER, COLOR WHEEL L.190
6	10.9678.0457.03	3	EA	SPACER, COLOR WHEEL L.123
7	10.9678.0457.04	3	EA	SPACER, COLOR WHEEL L.031
8	10.9678.0469	1	EA	REAR COLOR BULKHEAD
9	10.9678.0485	5	EA	PULLEY, COLOR MOTOR
10	21.9678.0331	1	EA	ASSY MOTOR/PLATE
11	21.9678.0334	1	EA	ASSY, FIXED COLOR WHEEL
12	22.9678.0335	1	EA	ASSY, BEARING BLOCK, FIXED WHEEL
	- 10.9678.0323	1	EA	WHEEL MOUNT
	- 54.1259.0004	2	EA	BEARING, RADIAL FLANGED 0.25"ID 0.625"OD
13	22.9678.0403	1	EA	ASSY, STROBE
	22.9678.0463	1	EA	ASSY, STROBE (VL3000 QUIET)
14	22.9678.0435	1	EA	ASSY, DIMMER WHEEL
15	22.9678.0472	1	EA	ASSY, CYAN WHEEL
16	22.9678.0474	1	EA	ASSY, YELLOW WHEEL
17	22.9678.0476	1	EA	ASSY, MAGENTA WHEEL
18	22.9678.0478	1	EA	ASSY, CTO WHEEL
19	22.9678.0481	1	EA	MOUNT ASSY, COLOR SENSE PCB #1
20	10.9678.0486	1	EA	FRONT COLOR BULKHEAD
21	22.9678.0489	1	EA	ASSY, COLOR SENSE PCB #2 MOUNT
22	24.9678.3240	1	EA	PCB ASSY, WHEEL POSITION SENSOR
-	25.9678.1409	1	EA	PCB/CABLE ASSY, COLOR INTERCNT (**not shown**)
-	25.9678.1419	1	EA	PCB/CABLE ASSY, COLOR INTERCNT (**not shown**) (VL3500 QUIET)
23	44.9678.0455	5	EA	COLOR MOTOR
24	53.2202.0008	1	EA	NUT, 8-32 HEX SS, NYLON INSERT
25	53.2200.0006	12	EA	NUT, 6-32 KEPS SS
26	53.5559.0250	12	EA	SCREW, 6-32 X 1/4" SET CONE PO

No.	Item	Qty.	UM.	Description
27	53.5638.0252	12	EA	SCREW, 6-32 X 1/4"LG PFS UNDERCUT HEAD
28	53.6558.0001	7	EA	SCREW, 6-32 X 3/8" PPZ
29	53.6597.0001	2	EA	SCREW, 4-40 X 3/16" PPZ
30	53.6608.0003	5	EA	SCREW, 6-32 X 3/16"LG PPZ
31	54.2036.0017	1	EA	BELT, TIMING N=150 W=.125 URETHANE/KEVLAR
32	54.2059.0001	4	EA	TIMING BELT, MXL PITCH 150 TOOTH SI/KEVLAR
33	54.2060.0001	1	EA	BELT, TIMING MXL PITCH 165 TOOTH SI/KEVLAR
34	55.2132.0011	4	EA	STANDOFF, 1/4"HEX 6-32 X 1.093"L SS
35	55.2132.0012	4	EA	STANDOFF, 1/4"HEX 6-32 X 0.75"LG SS
36	55.3303.0004	2	EA	WASHER, #4 LOCK INT.TOOTH SS
37	55.3303.0006	6	EA	WASHER, #6 LOCK INT.TOOTH SS
38	55.6503.0004	1	EA	WASHER, #8 FLAT ZINC
39	55.6528.0001	2	EA	WASHER, #6 FLAT ZINC
-	55.2110.0002	3	EA	WASHER, 0.400" OD, 0.260" ID, 0.010" L
-	55.2186.0002	5	EA	CABLE TIE, 0.09WD, 0.375 LG, TEFZEL (**not shown**)
40	55.6520.0001	2	EA	WASHER, WAVE SPRING, 1/4" DIA

Color/Dimmer/Strobe Assembly (continued)

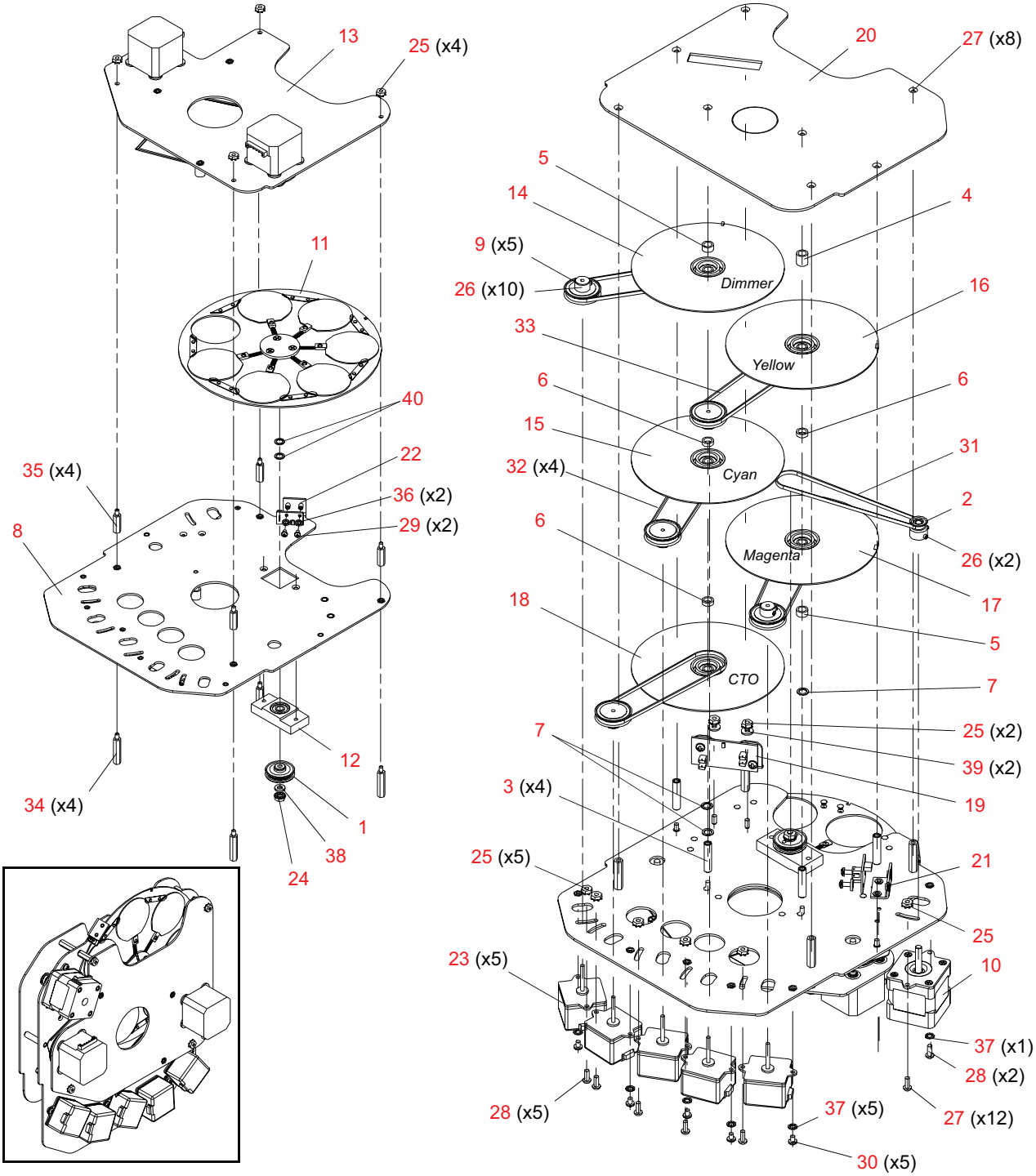


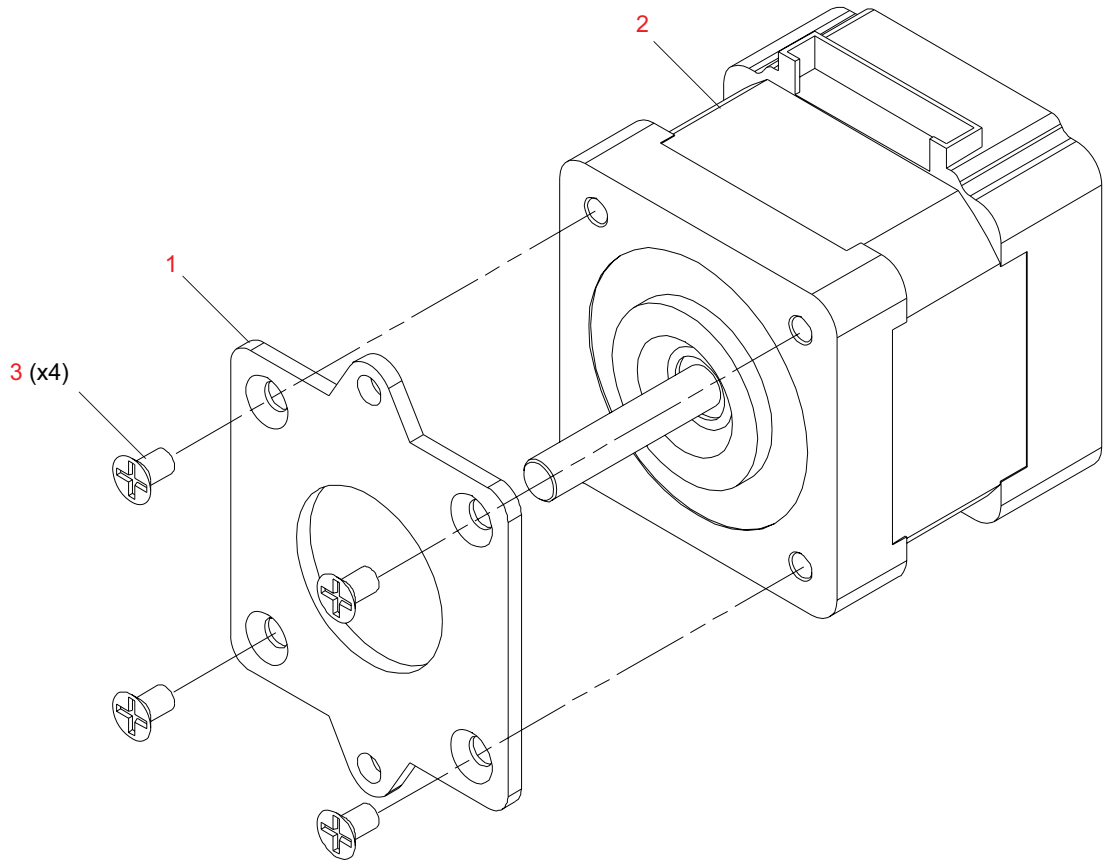
Figure 3-30: Color/Dimmer/Strobe Assembly

Motor/Adapter Plate Assembly

21.9678.0331 Rev 0

Refer to Figure 3-31

No.	Item	Qty.	UM.	Description
1	10.9678.0330	1	EA	PLATE, MOTOR ADAPTER
2	44.5031.0001	1	EA	MOTOR, STEPPER 42MM X 40MM,10
3	53.6513.0002	4	EA	SCREW, 3MM X 5MM LG PFZ METR



Note orientation of adapter plate in relation to the motor.

Figure 3-31: Motor/Adapter Plate Assembly

Fixed Color Wheel Assembly

21.9678.0334 Rev D

Refer to Figure 3-32

No.	Item	Qty.	UM.	Description
1	10.9678.0322	1	EA	SPIN SHAFT, COLOR WHEEL
2	10.9678.0332	6	EA	SLIDING RETAINER
3	10.9678.0333	6	EA	RETAINER CLIP
4	22.9678.1336	1	EA	FAB ASSY, FIXED WHEEL/CLIP (changed 9-03-03)
5	41.9678.0305.01	1	EA	COLOR FILTER, DEEP RED VL3000
6	41.9678.0305.02	1	EA	COLOR FILTER, KELLY GREEN VL3000
7	41.9678.0305.03	1	EA	COLOR FILTER, CONGO BLUE VL3000
8	41.9678.0305.04	1	EA	COLOR FILTER, MAGENTA VL3000
9	41.9678.0305.05	1	EA	COLOR FILTER, ORANGE VL3000
10	41.9678.0305.06	1	EA	COLOR FILTER, DARK FUSHIA VL3000
11	53.6534.0001	6	EA	RIVET, 3/32"OD POP 3/32 GRIP RANGE
12	53.6608.1857	3	EA	SCREW, 6-32 X 3/16"LG PFSS
13	55.2256.0001	1	EA	MAGNET, 2:17 SMCO 2MM X 2MM X 3MM
14	55.6568.0076	6	EA	SPRING, CPRSN 0.120"OD 0.750"LG
15	10.9678.0250	1	EA	MAGNET TAPE

Fixed Color Wheel Assembly (continued)

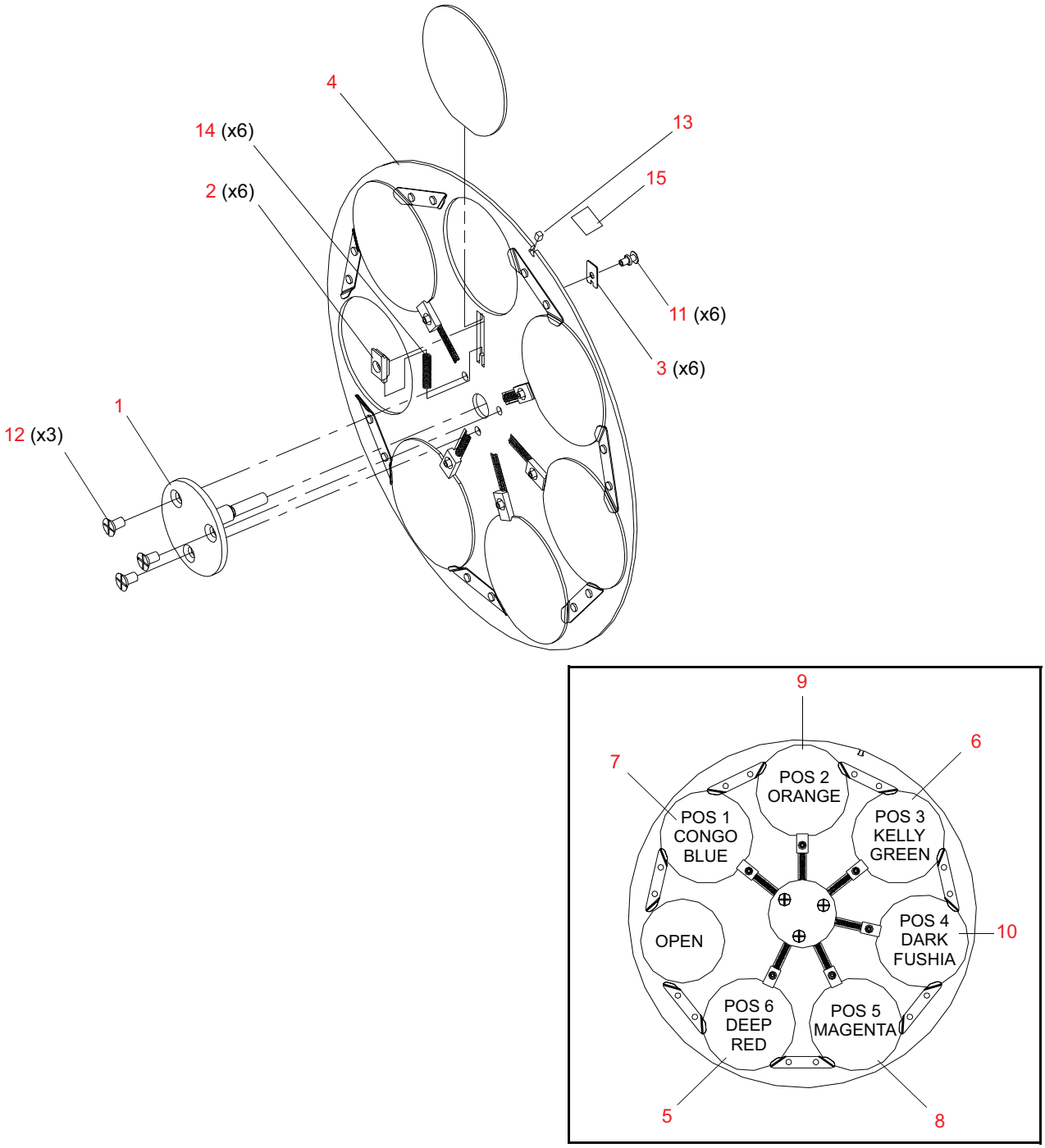


Figure 3-32: Fixed Color Wheel Assembly

Strobe Assembly

22.9678.0403 Rev F (VL3500 Only)

Refer to Figure 3-33

No.	Item	Qty.	UM.	Description
1	10.9678.0491	4	EA	BUMPER STOP, STROBE (changed on 6-18-03)
2	10.9678.0465	1	EA	STROBE BULKHEAD
3	22.9678.0468	1	EA	ASSY, LEFT STROBE BLADE
4	22.9678.0467	1	EA	ASSY, RIGHT STROBE BLADE
5	44.5029.0001	2	EA	MOTOR, STEPPER 42MM X 34MM -AR
6	53.6513.0032	8	EA	SCREW, M3X10MM SEMS PPZ EXT TO
7	53.6609.0500	4	EA	SCREW, 6-32 X 1/2" LG PFZ
8	55.6659.0001	8	EA	SPACER, 1/4" RND 4 THRU 3/16" AL (changed 03-01-04)
9	55.3306.0006	8	EA	WASHER, 0.375 OD 0.149 ID 0.025 THK SS (changed 08-12-03)
10	55.6706.0001	8	EA	GROMMET, 9/32" ID 9/16" OD 1/4T SILICON RED (changed 03-01-04)

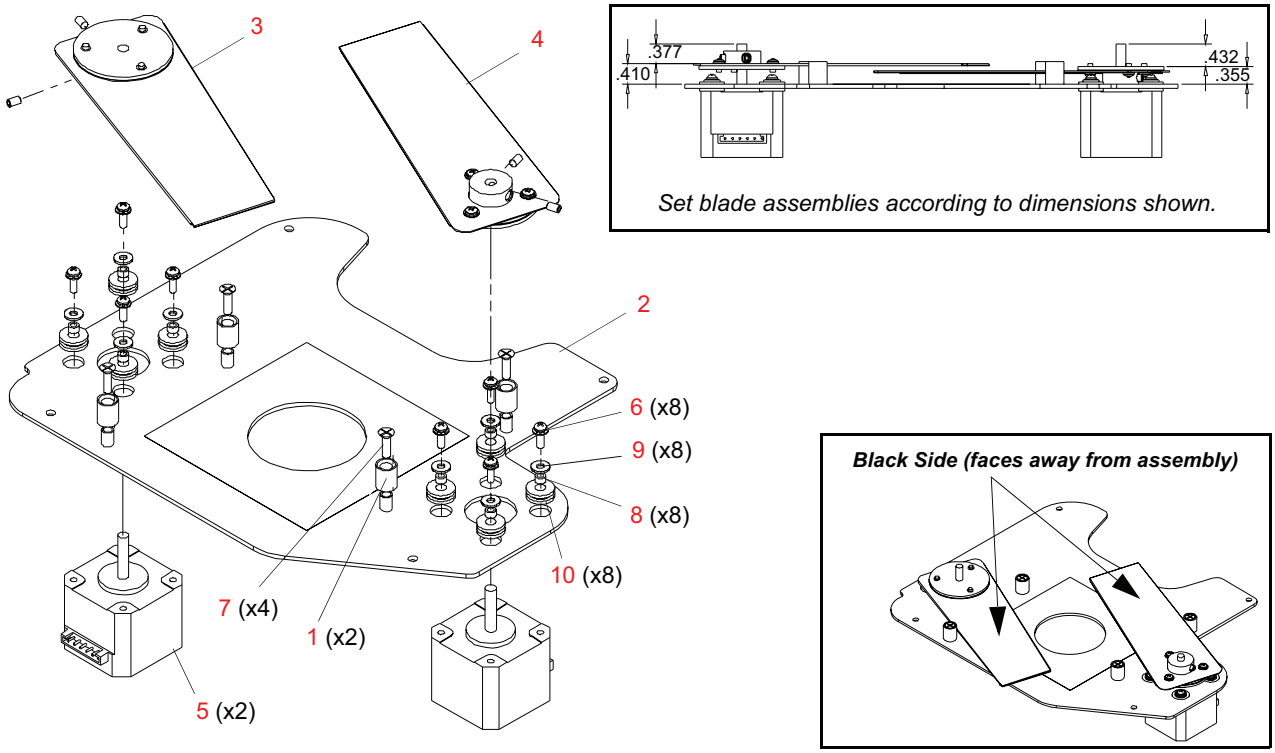


Figure 3-33: Strobe Assembly - VL3500 Only

Strobe (Quiet) Assembly

22.9678.0463 Rev B (VL3500Q Only)

Refer to Figure 3-33

No.	Item	Qty.	UM.	Description
1	10.9678.0491	4	EA	BUMPER STOP, STROBE
2	10.9678.0465	1	EA	STROBE BULKHEAD
3	22.9678.0467	1	EA	ASSEMBLY, RIGHT STROBE BLADE
4	22.9678.0468	1	EA	ASSEMBLY, LEFT STROBE BLADE
5	23.9678.0499	2	EA	ASSEMBLY, STROBE MOTOR, VL3000Q
6	53.6520.0001	8	EA	SCREW, #4-40 X 3/8 PPZ
7	53.6609.0500	4	EA	SCREW, 6-32 X 1/2"LG PFZ
8	55.3306.0006	8	EA	WASHER,.375 OD.149 ID.025 THK SS
9	55.6537.0001	8	EA	WASHER, #4 INTERNAL LOCK TOOTH
10	55.6659.0001	8	EA	SPACER, 1/4" RND 4 THRU 3/16" AL
11	55.6706.0001	8	EA	GROMMET, 9/32" ID, 9/16" OD, 1/4" TH SILICONE

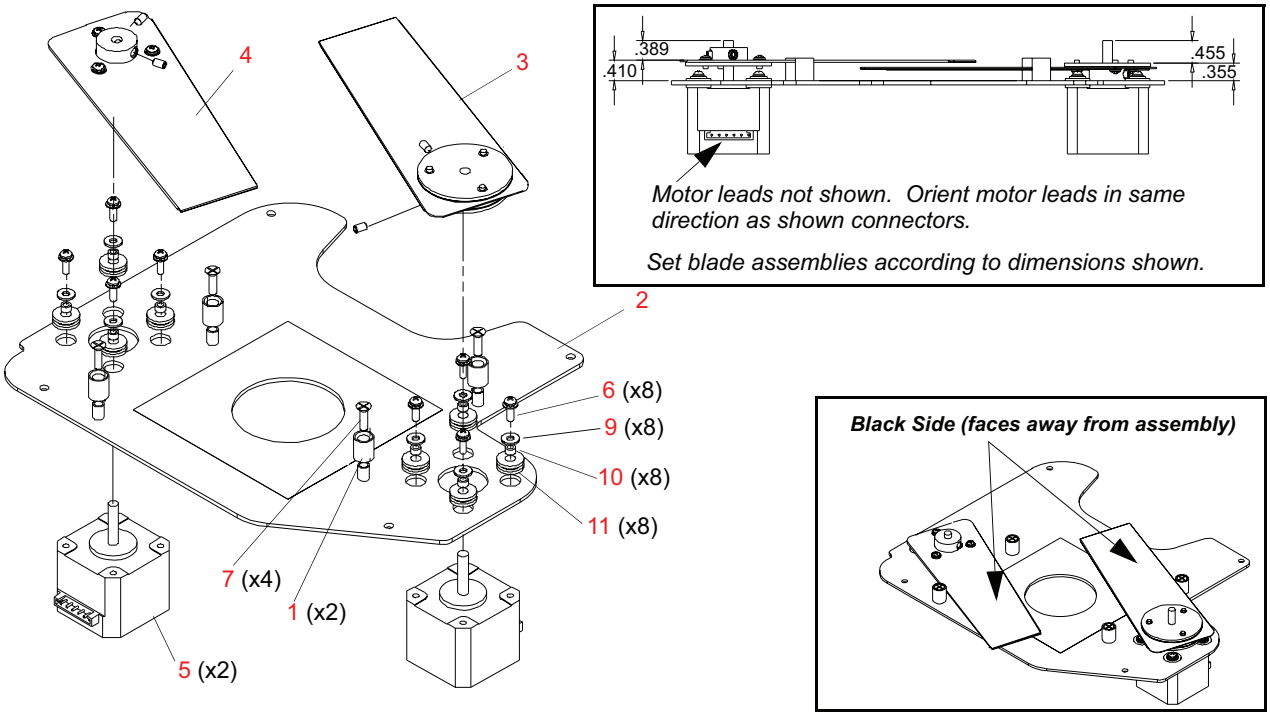


Figure 3-34: Strobe Assembly - VL3500Q Only

Right Strobe Blade Assembly

22.9678.0467 Rev C

Refer to Figure 3-35

No.	Item	Qty.	UM.	Description
1	10.9678.0464	1	EA	STROBE BLADE (changed 07-29-04)
2	10.9678.0432	1	EA	HUB, STROBE BLADE
3	10.9678.0466	1	EA	STROBE BLADE, DAMPER
4	53.5559.0250	2	EA	SCREW, 6-32 X 1/4" SET CONE POINT
5	53.6597.0001	3	EA	SCREW, 4-40 X 3/16" PPZ
6	55.3303.0004	3	EA	WASHER, #4 LOCK INT. TOOTH SS

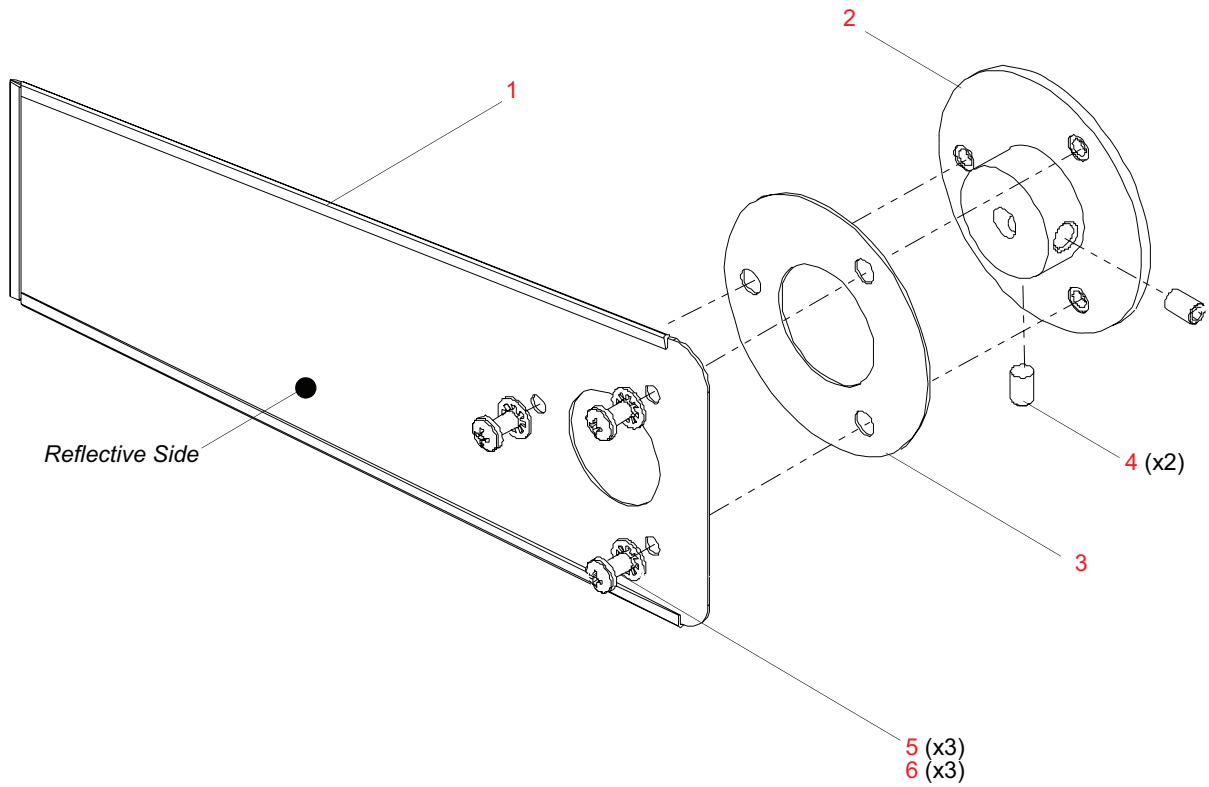


Figure 3-35: Right Strobe Blade Assembly

Left Strobe Blade Assembly

22.9678.0468 Rev C

Refer to Figure 3-36

No.	Item	Qty.	UM.	Description
1	10.9678.0464	1	EA	STROBE BLADE (changed 07-29-04)
2	10.9678.0432	1	EA	HUB, STROBE BLADE
3	10.9678.0466	1	EA	STROBE BLADE, DAMPER
4	53.5559.0250	2	EA	SCREW, 6-32 X 1/4" SET CONE POINT
5	53.6597.0001	3	EA	SCREW, 4-40 X 3/16" PPZ
6	55.3303.0004	3	EA	WASHER, #4 LOCK INT. TOOTH SS

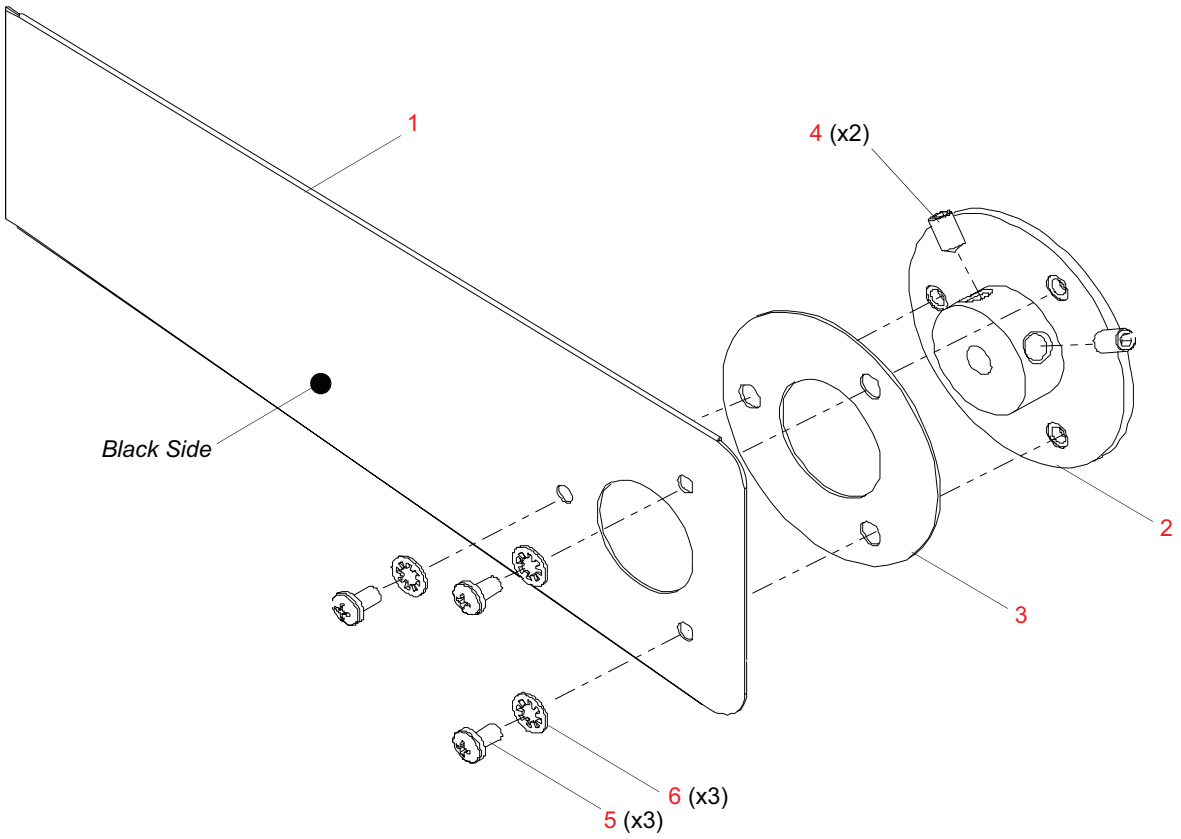


Figure 3-36: Left Strobe Blade Assembly

Strobe Motor (Quiet) Assembly

23.9678.0499 Rev A (VL3500Q Only)

Refer to Figure 3-37

No.	Item	Qty.	UM.	Description
1	44.5035.0001	1	EA	STEPPER MOTOR, 2 PHASE, PK
2	52.6524.0004	1	EA	CONNECTOR, HOUSING, 4 POS RECEPT
3	52.8346.0001	4	EA	CONTACT, 24-30 AWG FEMALE CRIMP
4	55.2200.0003	0.25	FT	HEAT SHRINK, 3/16" VITON

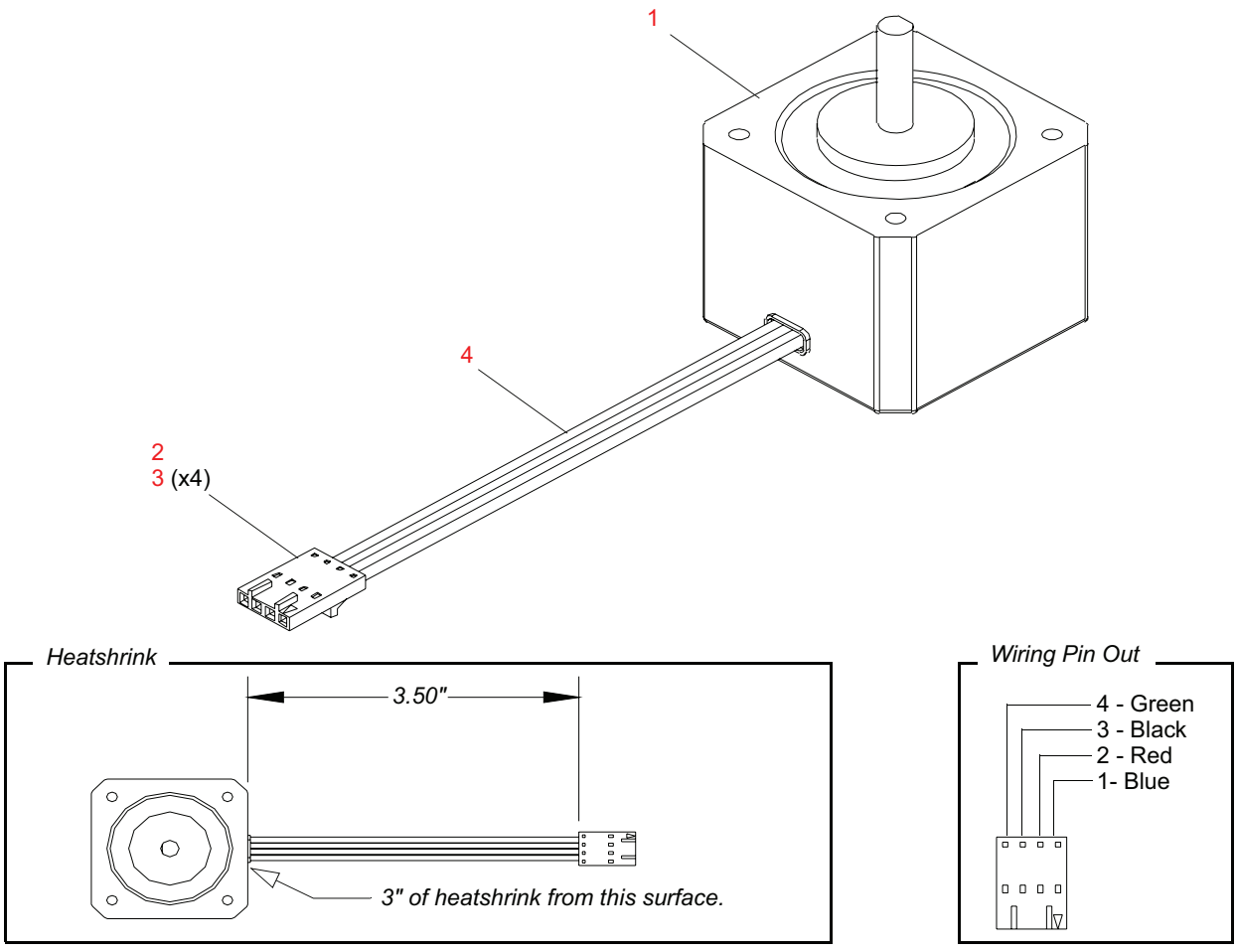


Figure 3-37: Strobe Motor (Quiet) Assembly

Dimmer Wheel Assembly

22.9678.0435 Rev D

Refer to Figure 3-38

No.	Item	Qty.	UM.	Description
1	55.2256.0001	1	EA	MAGNET, 2:17 SMCO 2MM X 2MM

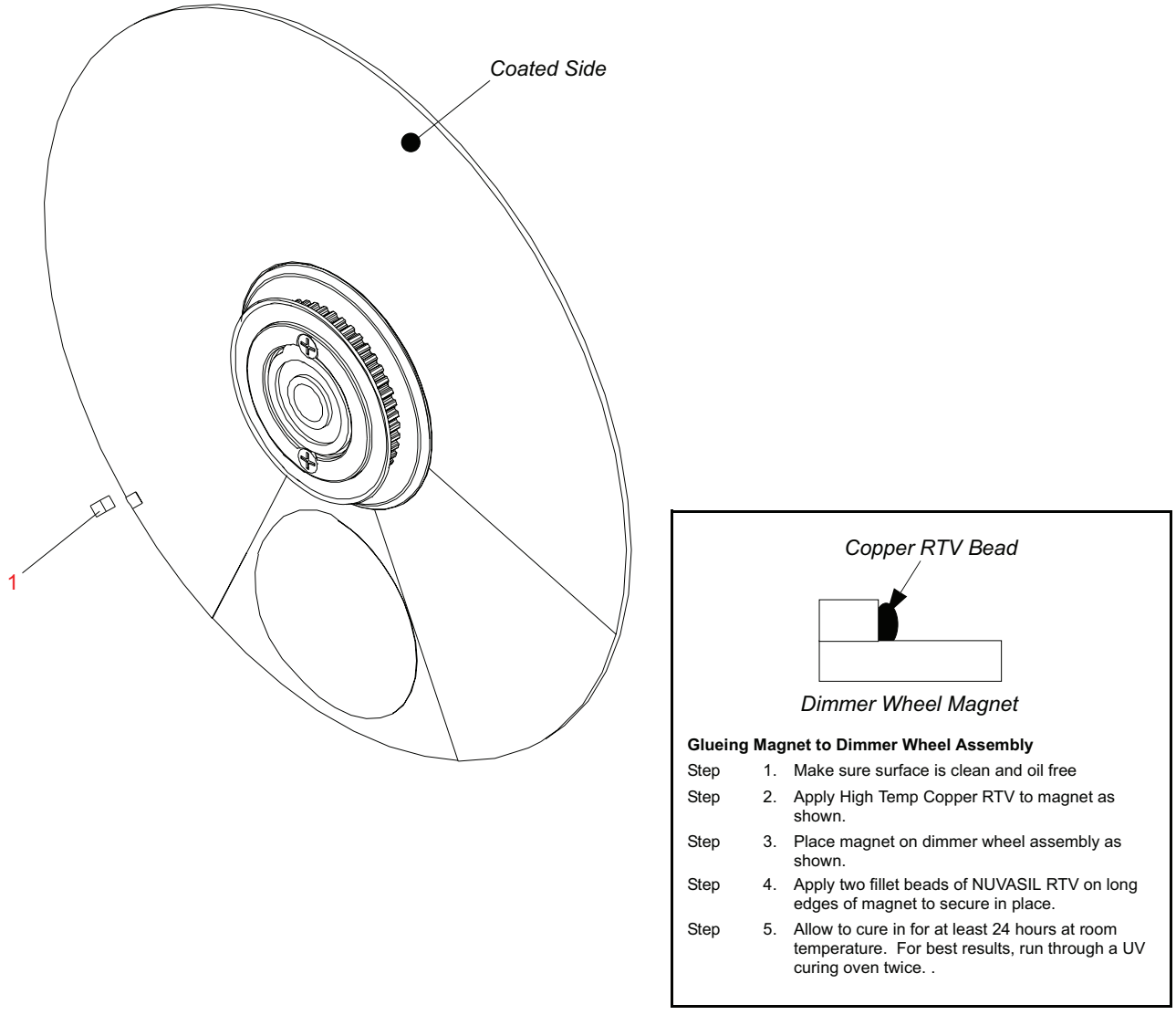

Coated Side
1
Copper RTV Bead
Dimmer Wheel Magnet
Glueing Magnet to Dimmer Wheel Assembly
Step 1. Make sure surface is clean and oil free
Step 2. Apply High Temp Copper RTV to magnet as shown.
Step 3. Place magnet on dimmer wheel assembly as shown.
Step 4. Apply two fillet beads of NUVASIL RTV on long edges of magnet to secure in place.
Step 5. Allow to cure in for at least 24 hours at room temperature. For best results, run through a UV curing oven twice. .

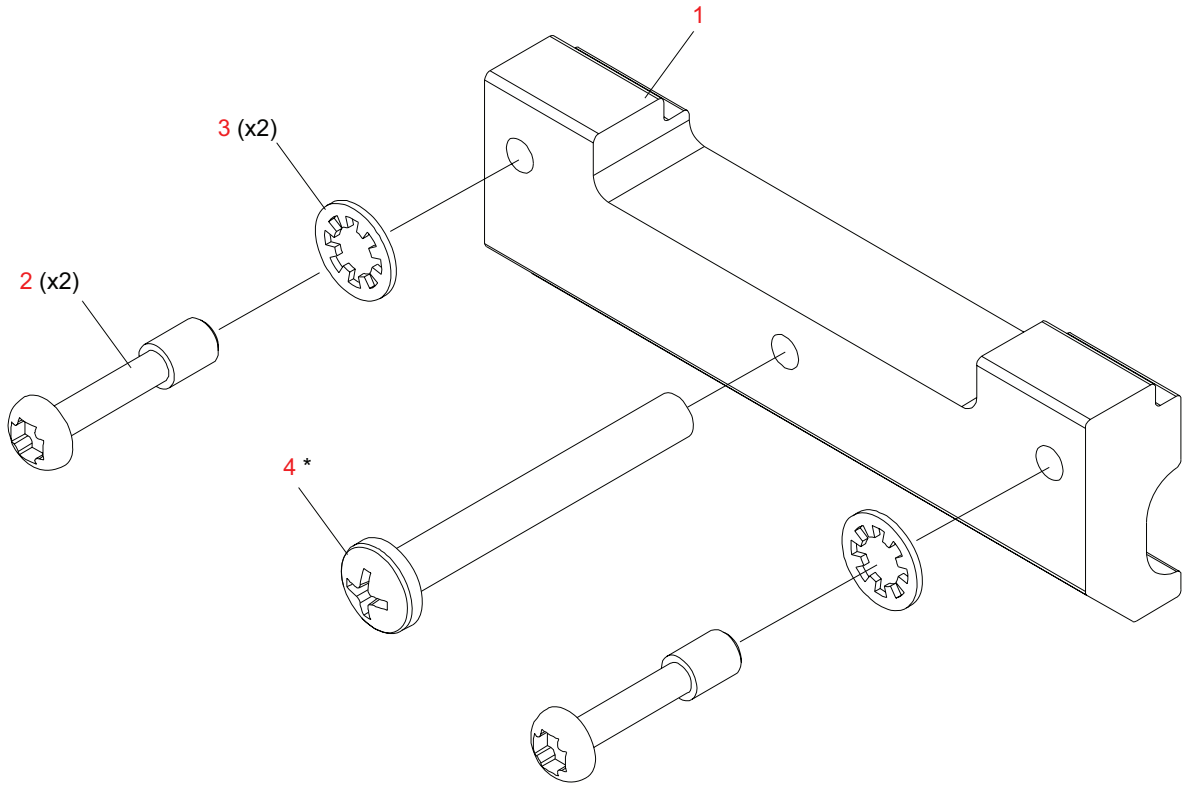
Figure 3-38: Dimmer Wheel Assembly

Gobo Clamp Assembly

22.9678.0693 Rev A

Refer to Figure 3-39

No.	Item	Qty.	UM.	Description
1	12.9678.0691	1	EA	GOBO CLAMP
2	53.6685.0625	2	EA	SCREW, CAPTIVE PANEL, 6-32 X 0.625"LG PPS ZINC PLATED
3	55.6538.0001	2	EA	WASHER, #6 LOCK INTERNAL TOOTH
4	53.6613.1126	1	EA	SCREW, 6-32 X 1.125 LG PPZ



** Note: Install item 4 with Loctite® 242.*

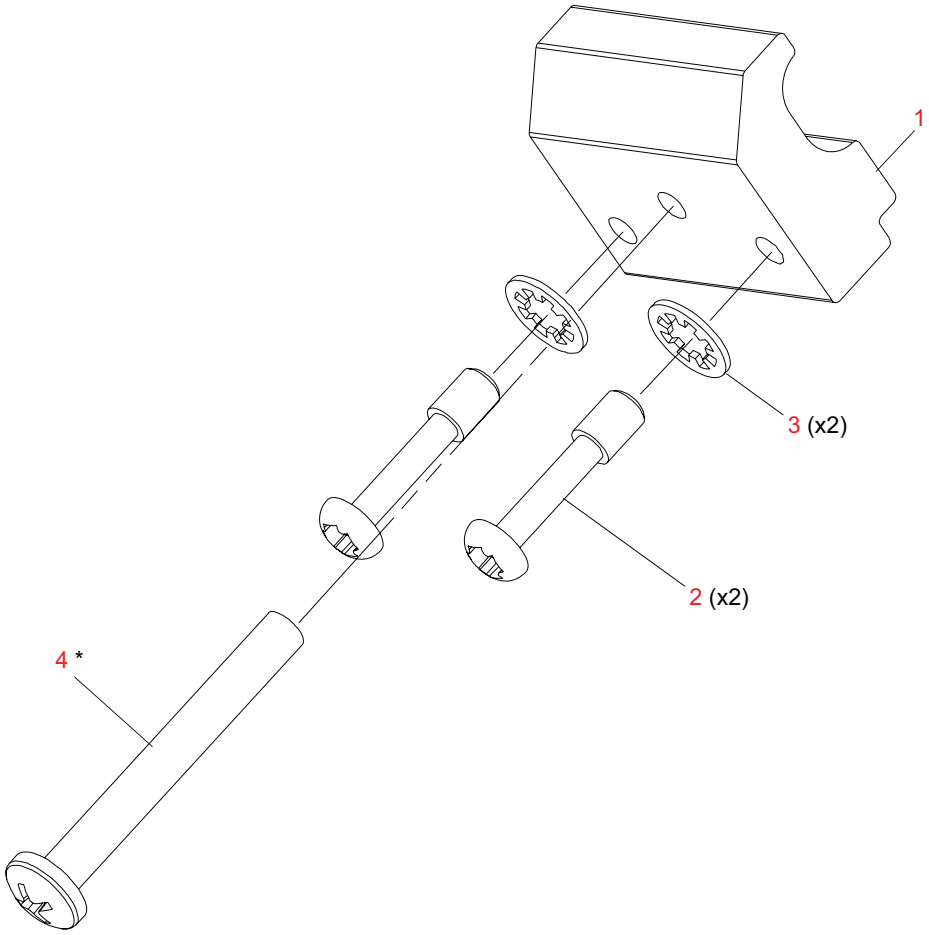
Figure 3-39: Gobo Clamp Assembly

Color Clamp Assembly

22.9678.0694 Rev A

Refer to Figure 3-40

No.	Item	Qty.	UM.	Description
1	12.9678.0692	1	EA	COLOR CLAMP
2	53.6685.0625	2	EA	SCREW, CAPTIVE PANEL, 6-32 X.625"LG PPS ZINC PLATED
3	55.6538.0001	2	EA	WASHER, #6 LOCK INTERNAL TOOTH
4	53.6613.1126	1	EA	SCREW, 6-32 X 1.125 LG PPZ



** Note: Install item 4 with Loctite® 242.*

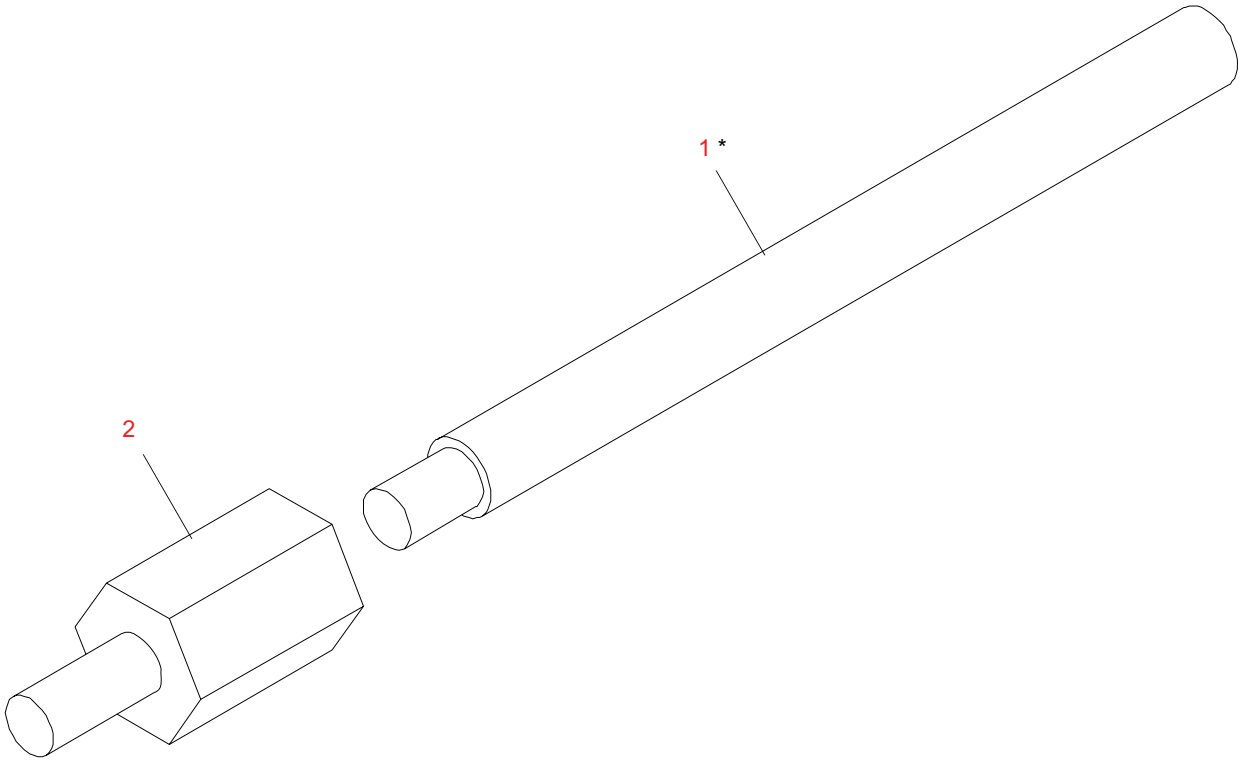
Figure 3-40: Color Clamp Assembly

Edge Lead Screw Assembly

22.9678.1126 Rev B

Refer to Figure 3-41

No.	Item	Qty.	UM.	Description
1	10.9678.1119	1	EA	LEAD SCREW, EDGE
2	55.6616.0007	1	EA	STANDOFF, 3/8" HEX THRD 0.562" LG



** Note: Apply one drop of Loctite® 272 to the threads of item 1.*

Figure 3-41: Edge Lead Screw Assembly

Yoke Assembly

Yoke Assembly

21.9678.0700 Rev J (VL3500)
21.9678.0701 Rev B (VL3500Q)

Refer to Figure 3-42

No.	Item	Qty.	UM.	Description
1	10.9678.0764	1	EA	PLATE, TILT ENCODER MOUNT
2	10.9678.0756	1	EA	IGNITOR SHIELD
3	21.9678.0765	1	EA	ASSY, TILT MOTOR
4	22.9661.0609	2	EA	ASSY, YOKE FAN
	22.9678.0609	2	EA	ASSY, YOKE FAN, VL3500 QUIET
5	22.9686.0705	1	EA	ASSY, YOKE STRUCTURE
6	23.9650.3327	1	EA	ELEC ASSY, RELAY
7	23.9661.1253	1	EA	ELEC ASSY, TILT EOT SENSOR
8	24.9661.3126	1	EA	PCB ASSY, SOLID STATE IGNITOR
-	25.9661.1526	2	EA	CABLE ASSY, IGNITOR TO RELAY **(NOT SHOWN)**
-	25.9678.0681	1	EA	CABLE ASSY, YOKE FAN AND RELAY **(NOT SHOWN)**
-	25.9678.0781	1	EA	CABLE ASSY, YOKE FAN AND RELAY, VL3500 QUIET **(NOT SHOWN)**
-	25.9678.0758	1	EA	CABLE ASSY, YOKE FAN **(NOT SHOWN)**
-	25.9678.0759	1	EA	CABLE ASSY, YOKE FAN, VL3500 QUIET **(NOT SHOWN)**
9	53.2019.0004	2	EA	NUT, 3/8-16 X 7/32" THK HEX
10	53.2200.0006	1	EA	NUT, 6-32 KEPS SS
11	53.5634.0250	8	EA	SCREW, 4-40 X 1/4" PFSS BL
12	53.6539.0001	2	EA	WASHER, 3/8" SPLIT LOCK
13	53.6558.0009	12	EA	SCREW, 6-32 X 3/8"LG PPZ SEM
14	53.6626.0001	6	EA	SCREW, 10-32 X 1/2" PPZ
15	53.6634.0003	2	EA	SCREW, 3/8-16 X 1/2"LG SOC
16	55.2150.0002	1	EA	STANDOFF, 1/4" HEX 6-32 1.187"L
17	55.2178.0001	1	EA	CABLE ANCHOR MOUNT, #8 SCREW MOUNT
18	55.6528.0001	2	EA	WASHER, #6 FLAT ZINC
19	55.6541.0002	2	EA	GROMMET, 1 "ID 1 3/4"OD 1 3/8 GROOVE DIA
20	55.6568.0074	2	EA	SPRING, CPRSN .420"OD .750"LG
21	55.6658.0004	2	EA	STANDOFF, 1/4" HEX 6-32 .750"LG, F-F, AL

Yoke Assembly (continued)

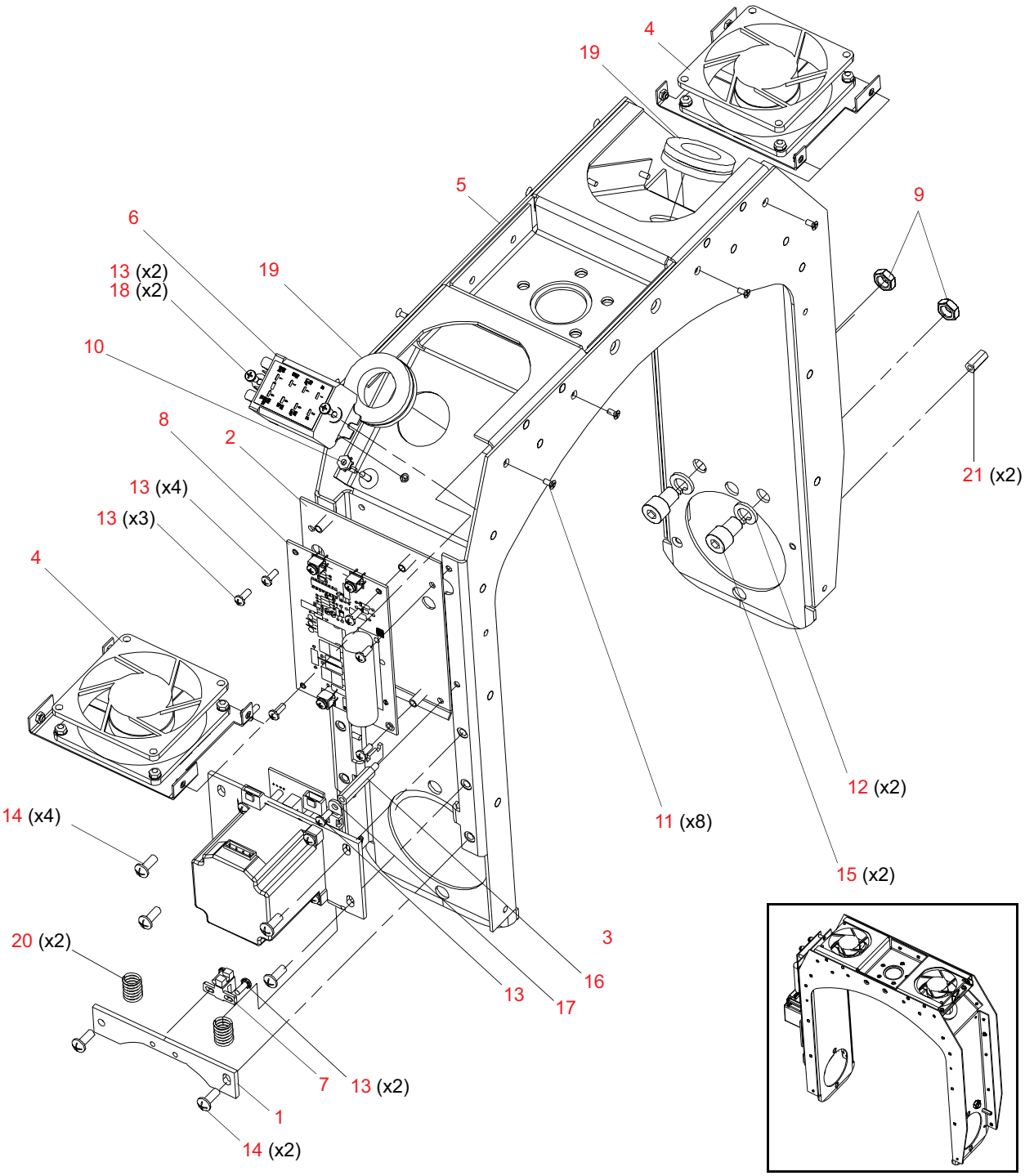


Figure 3-42: Yoke Assembly

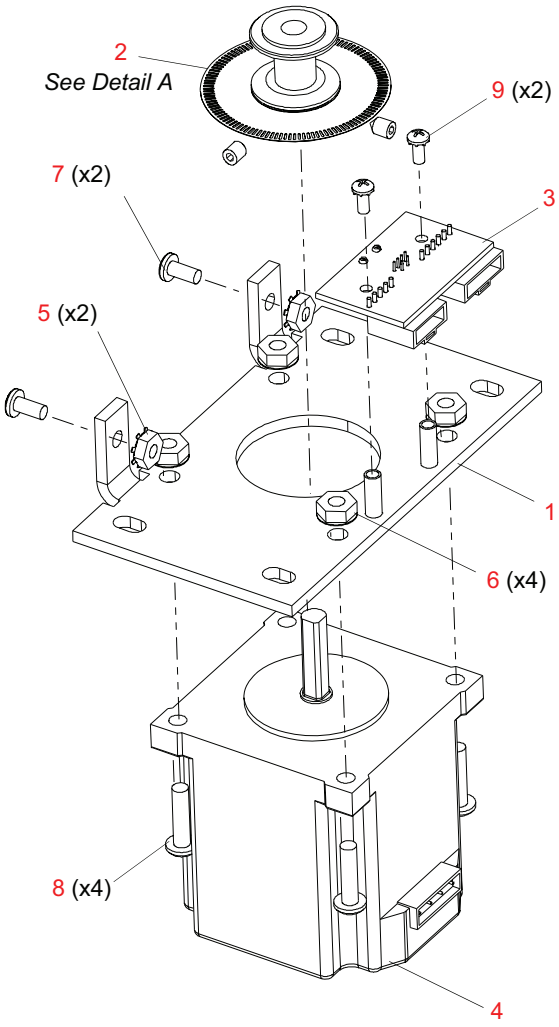
Tilt Motor Assembly

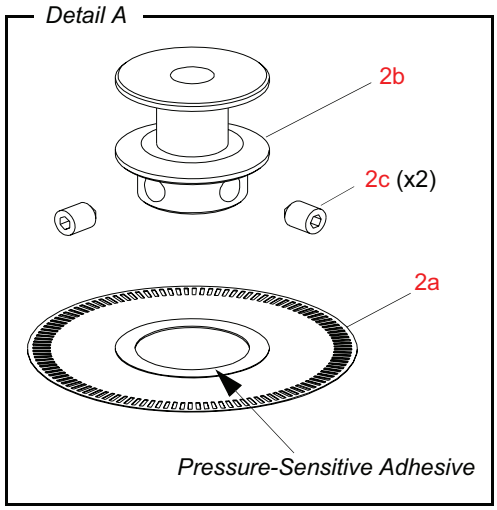
21.9678.0765 Rev E

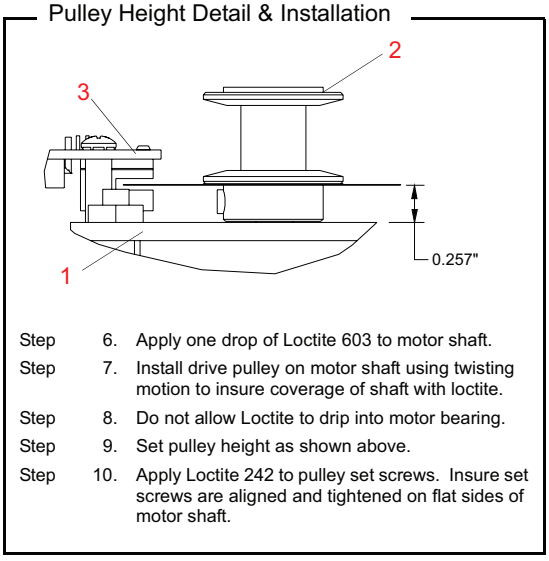
Refer to Figure 3-43

No.	Item	Qty.	UM.	Description
1	10.9678.0763	1	EA	PLATE, TILT MOTOR MOUNT
2	21.9678.0708	1	EA	ASSY, DRIVE PULLEY
2a	10.9678.0720	1	EA	CODEWHEEL, 120 COUNT, LARGE ID
2b	10.9678.1749	1	EA	TIMING PULLEY, 17 TOOTH, SHORTENED
2c	53.5560.0250	2	EA	SCREW, 8-32 X 1/4" SET CONE POINT
3	24.9661.9629	1	EA	PCB ASSY, PAN/TILT ENCODER
4	44.9678.0680	1	EA	MOTOR, 3 PHASE SIZE 23 HIGH TORQUE
5	53.2200.0006	2	EA	NUT, 6-32 KEPS SS
6	53.2200.0008	4	EA	NUT, 8-32 KEPS SS
7	53.6525.0001	2	EA	SCREW, 6-32 X 5/16" PPZ
8	53.6546.0001	4	EA	SCREW, 8-32 X 5/8" PPB
9	53.6682.0002	2	EA	SCREW, 4-40 X 1/4"LG PPZ SEMS-EXT

Tilt Motor Assembly (continued)






Pulley Height Detail & Installation
2
3
1
0.257"
Step 6. Apply one drop of Loctite 603 to motor shaft.
Step 7. Install drive pulley on motor shaft using twisting motion to insure coverage of shaft with loctite.
Step 8. Do not allow Loctite to drip into motor bearing.
Step 9. Set pulley height as shown above.
Step 10. Apply Loctite 242 to pulley set screws. Insure set screws are aligned and tightened on flat sides of motor shaft.

Note: Vari-Lite recommends that this assembly be replaced as a complete assembly. Although you can replace only the motor, the pulley (Item 2) is bonded to the motor shaft during assembly and cannot be removed intact. If you order a replacement motor (Item 4), also order the pulley (Item 2). Contact Vari-Lite Customer Service for installation information.

Figure 3-43: Tilt Motor Assembly

Yoke Fan Assembly

22.9661.0609 Rev C (VL3500)
22.9678.0609 Rev A (VL3500Q)

Refer to Figure 3-44

No.	Item	Qty.	UM.	Description
1	10.9661.0646	1	EA	FAN TRAY
2	40.7113.0001	1	EA	FAN, +24V 80 X 80 X 25MM, 32CFM
3	53.2200.0006	4	EA	NUT, 6-32 KEPS SS
-	55.2179.0003	1	EA	CABLE SADDLE, .75 X .75 4WAY, VL3500 QUIET **(NOT SHOWN)**
-	55.2186.0001	1	EA	CABLE TIE, .10 WD X 4" LG, VL3500 QUIET **(NOT SHOWN)**

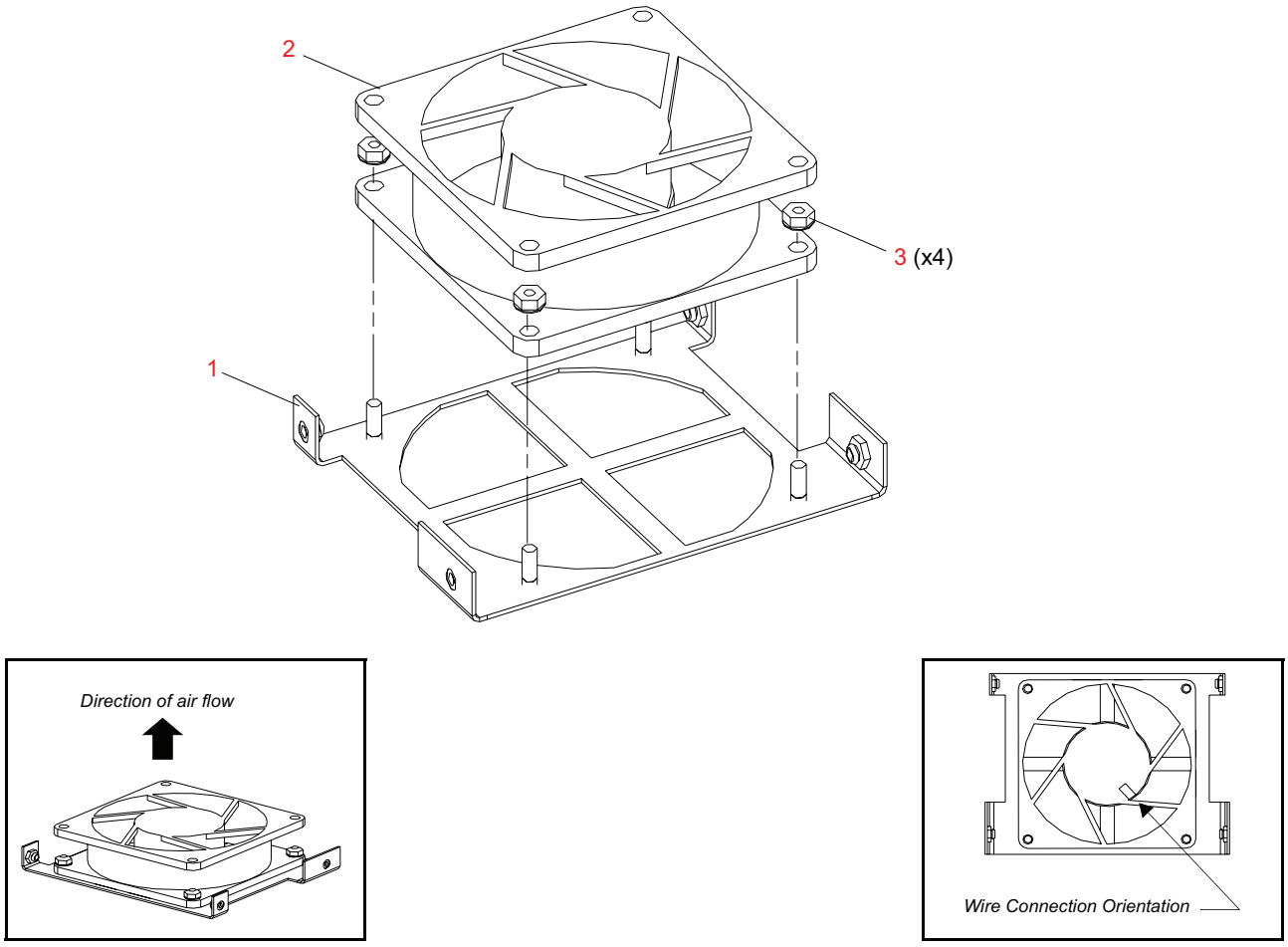


Figure 3-44: Yoke Fan Assembly

Notes

Head/Yoke PCB Assemblies

Shutter Cable Interconnect Assembly

21.9678.1246 Rev A

Refer to Figure 3-45

No.	Item	Qty.	UM.	Description
1	10.9678.1245	1	EA	MOUNT, CABLE INTERCONNECT, SHUTTER
2	52.6670.0034	1	EA	HEADER, MOD II, 34 PIN, DUAL SIDED
3	52.6670.0040	1	EA	HEADER, MOD II, 40 PIN, DUAL SIDED
4	53.6520.0002	4	EA	SCREW, 4-40 X 7/16" PPZ
5	55.6621.0001	4	EA	WASHER, #4 FLAT ZINC

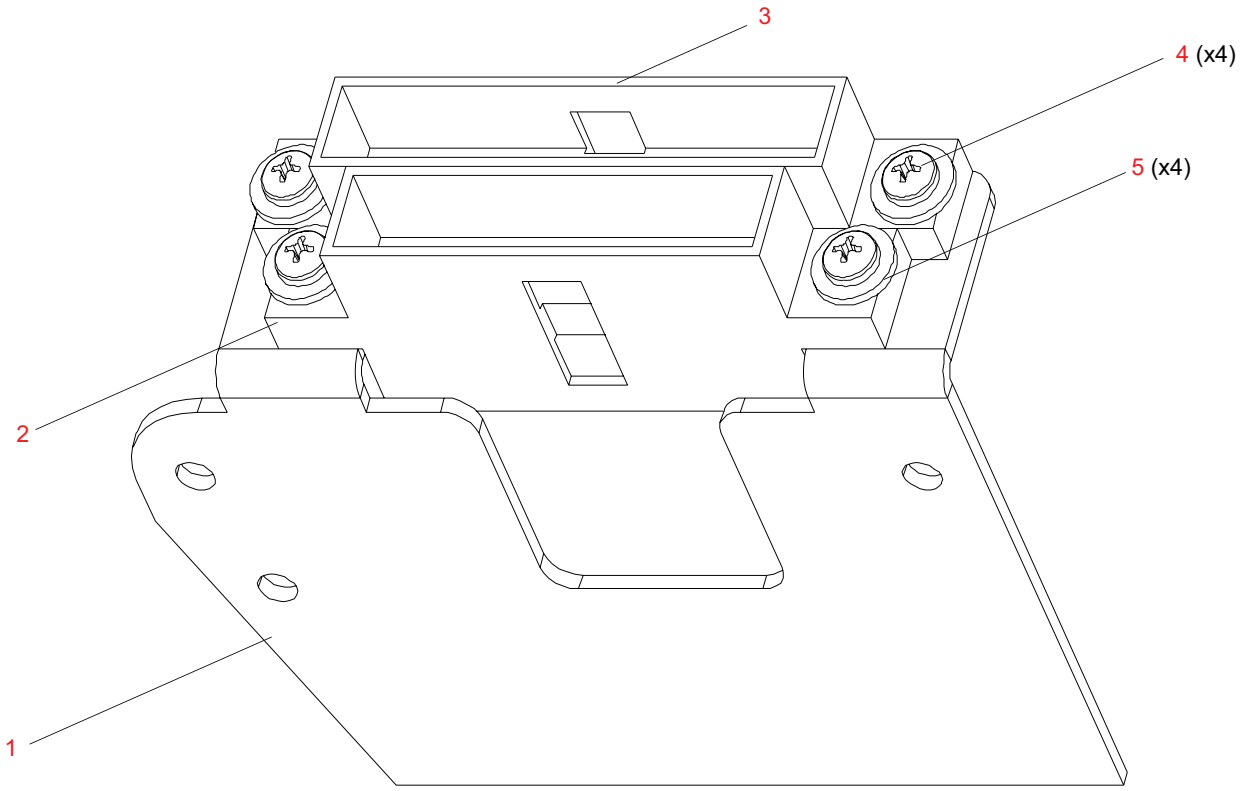


Figure 3-45: Shutter Cable Interconnect Assembly

Color Sensor PCB #1 Mount Assembly

22.9678.0481 Rev B

Refer to Figure 3-46

No.	Item	Qty.	UM.	Description
1	10.9678.0482	1	EA	PCB MOUNT, COLOR SENSOR #1
2	24.9678.3480	1	EA	PCB ASSY, COLOR SENSOR #1
3	53.6558.0001	2	EA	SCREW, 6-32 X 3/8" PPZ
4	55.3303.0006	2	EA	WASHER, #6 LOCK INT.TOOTH SS

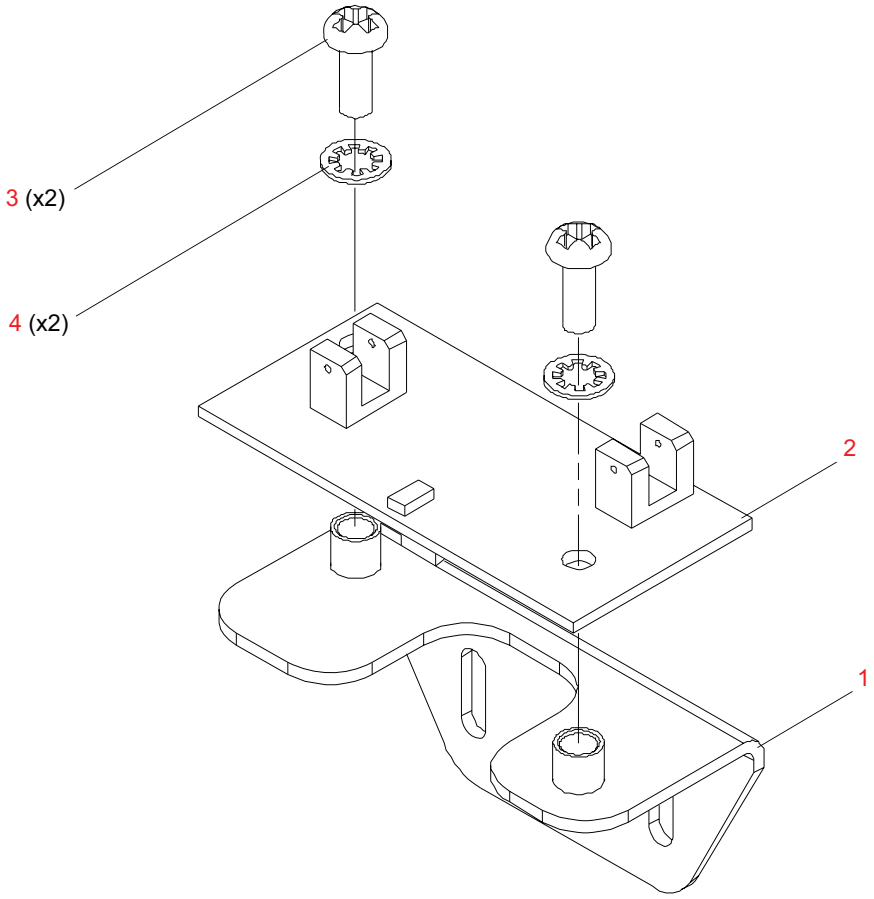


Figure 3-46: Color Sensor #1 PCB Mount Assembly

Color Sensor PCB #2 Mount Assembly

22.9678.0489 Rev B

Refer to Figure 3-47

No.	Item	Qty.	UM.	Description
1	10.9678.0452	1	EA	PCB MOUNT, COLOR SENSOR #2
2	24.9678.3454	1	EA	PCB ASSY, COLOR SENSOR #2
3	53.6558.0007	2	EA	SCREW, 6-32 X 1/4" SEMS

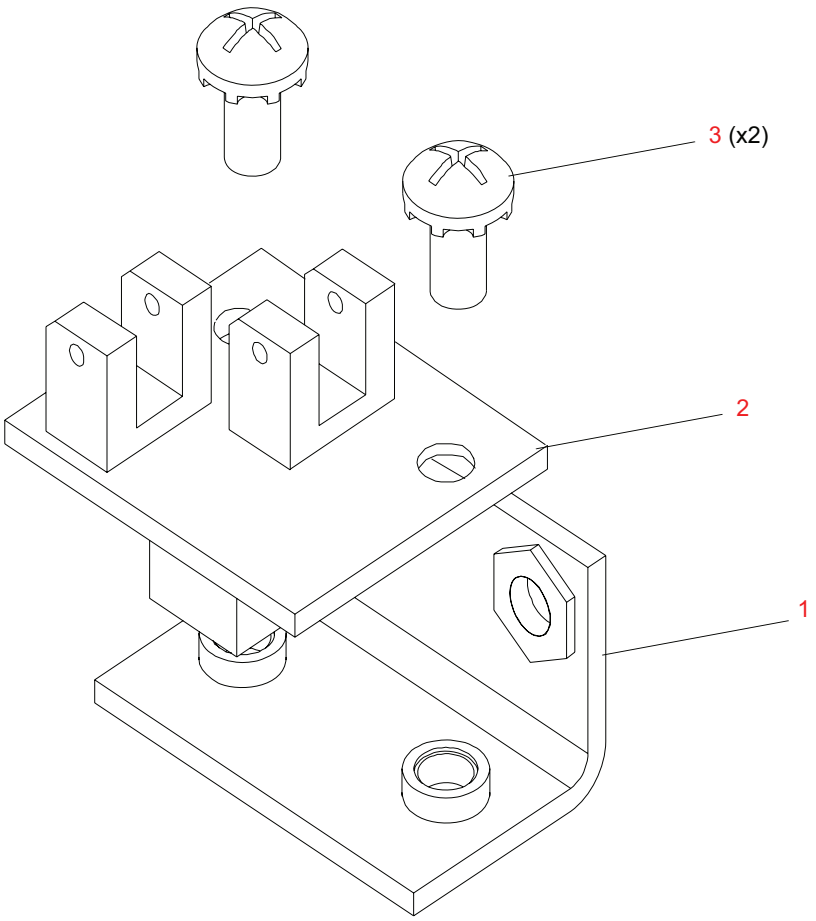


Figure 3-47: Color Sense PCB #2 Mount Assembly

Color Interconnect PCB/Cable Assembly

25.9678.1409 Rev B (VL3500 Only)

Refer to Figure 3-48 and Figure 3-49

No.	Item	Qty.	UM.	Description
1	24.9678.3409	1	EA	PCB ASSY, COLOR INTERCONNECT
2	28.9678.0409	1	EA	WIRE KIT, COLOR INTERCONNECT
-	- 04.9678.0409.00	1	EA	LABEL SET, COLOR HARNESS
-	- 11.9678.0409	1	EA	PCB, COLOR INTERCONNECT
-	- 52.6467.0003	1	EA	CONN, FEM PLUG 3POS 30-24 AWG
-	- 52.6467.0005	1	EA	CONN, FEM PLUG 5POS 30-24AWG
-	- 52.6467.0007	1	EA	CONN, FEM PLUG 7POS 30-24AWG
-	- 52.6467.0024	1	EA	CONTACT, SOCKET 30-24AWG CRIMP
-	- 52.6661.0006	1	EA	CONN, RECEPT 6CIR WIRE TO
-	- 52.6467.0011	5	EA	CONN, FEM PLUG 11 POS 30-24AWG
-	- 52.8387.0001	3	EA	CONTACT, 26-28AWG FEMALE CRIM
-	- 55.2186.0002	20	EA	CABLE TIE, .09"WD 3.750"LG TEF
-	- 73.2326.0123	17.34	FT	WIRE, 26AWG 4COND 300V200C TEF
-	- 73.2326.7001	2.01	FT	WIRE, 26AWG 7COND 300V 200C TE
-	- 73.2326.5001	1.3	FT	WIRE, 26AWG 5COND 300V 200C TE
-	- 73.2326.3003	1.04	FT	WIRE, 26AWG 3COND 300V 200C TEF

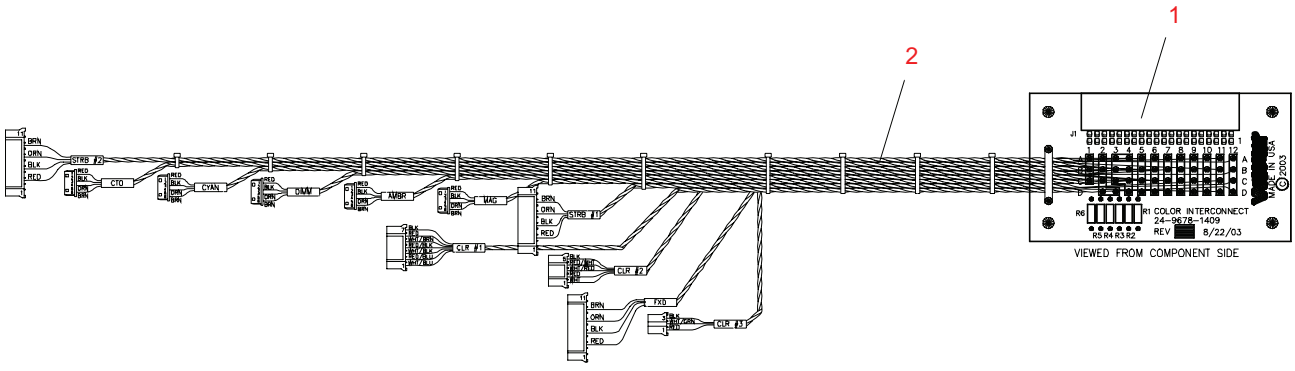
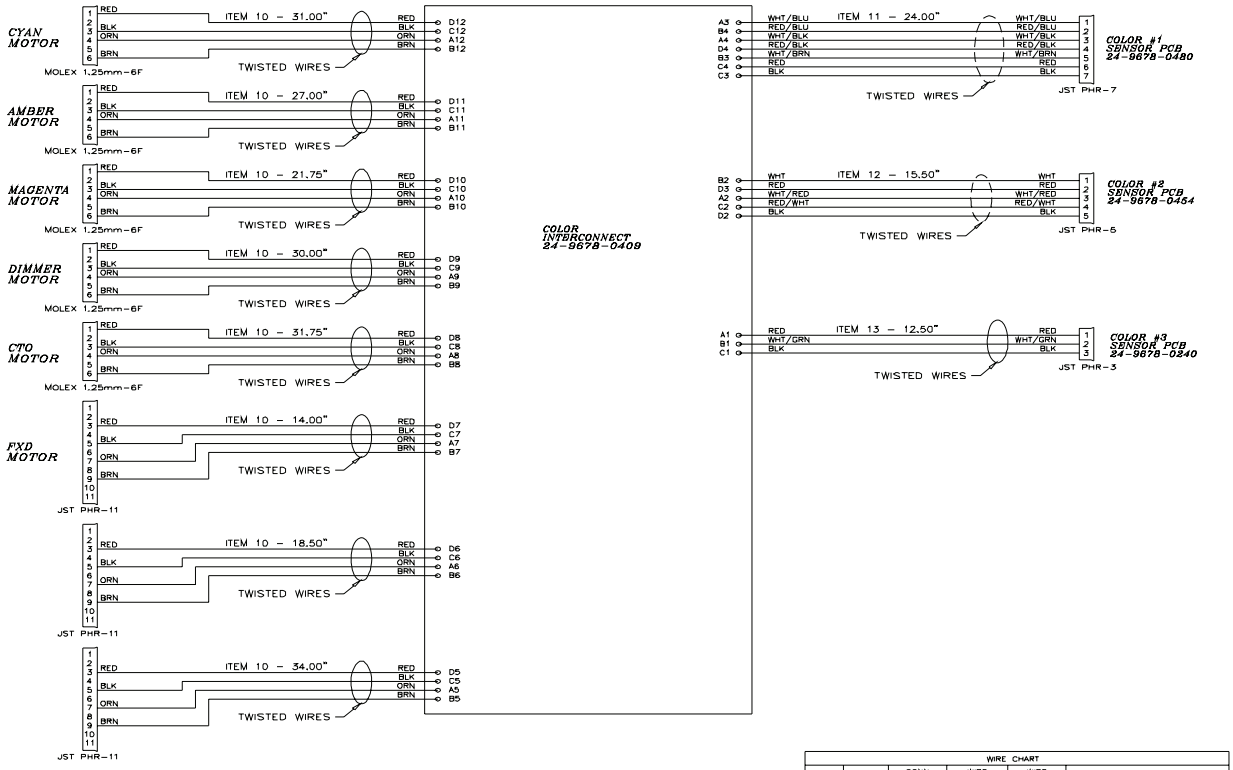


Figure 3-48: Color Interconnect PCB/Cable Assembly - VL3500 Only

Color Interconnect PCB/Cable Assembly (continued)



WIRE CHART					
FROM	TO	CONN ITEM NO.	WIRE COLOR	WIRE ITEM NO.	FUNCTION
A12	PIN 4	6	ORN	10	CYAN MOTOR - 2A
B12	PIN 6	6	BRN	10	CYAN MOTOR - 2B
C12	PIN 3	6	BLK	10	CYAN MOTOR - 1B
D12	PIN 1	6	RED	10	CYAN MOTOR - 1A
A11	PIN 4	6	ORN	10	AMBER MOTOR - 2A
B11	PIN 6	6	BRN	10	AMBER MOTOR - 2B
C11	PIN 3	6	BLK	10	AMBER MOTOR - 1B
D11	PIN 1	6	RED	10	AMBER MOTOR - 1A
A10	PIN 4	6	ORN	10	MAGENTA MOTOR - 2A
B10	PIN 6	6	BRN	10	MAGENTA MOTOR - 2B
C10	PIN 3	6	BLK	10	MAGENTA MOTOR - 1B
D10	PIN 1	6	RED	10	MAGENTA MOTOR - 1A
A9	PIN 4	6	ORN	10	DIMMER MOTOR - 2A
B9	PIN 6	6	BRN	10	DIMMER MOTOR - 2B
C9	PIN 3	6	BLK	10	DIMMER MOTOR - 1B
D9	PIN 1	6	RED	10	DIMMER MOTOR - 1A
A8	PIN 4	6	ORN	10	CTO MOTOR - 2A
B8	PIN 6	6	BRN	10	CTO MOTOR - 2B
C8	PIN 3	6	BLK	10	CTO MOTOR - 1B
D8	PIN 1	6	RED	10	CTO MOTOR - 1A
A7	PIN 7	7	ORN	10	FXD MOTOR - 2A
B7	PIN 9	7	BRN	10	FXD MOTOR - 2B
C7	PIN 5	7	BLK	10	FXD MOTOR - 1B
D7	PIN 3	7	RED	10	FXD MOTOR - 1A
A6	PIN 7	7	ORN	10	STROBE #1 MOTOR - 2A
B6	PIN 9	7	BRN	10	STROBE #1 MOTOR - 2B
C6	PIN 5	7	BLK	10	STROBE #1 MOTOR - 1B
D6	PIN 3	7	RED	10	STROBE #1 MOTOR - 1A
A5	PIN 7	7	ORN	10	STROBE #2 MOTOR - 2A
B5	PIN 9	7	BRN	10	STROBE #2 MOTOR - 2B
C5	PIN 5	7	BLK	10	STROBE #2 MOTOR - 1B
D5	PIN 3	7	RED	10	STROBE #2 MOTOR - 1A
A3	PIN 1	4	WHT/BLU	11	SENSE - CYAN
A4	PIN 3	4	WHT/BLK	11	SENSE - DIMMER
B3	PIN 5	4	WHT/BRN	11	SENSE - CTO
B4	PIN 2	4	RED/BLU	11	VCC_R - CYAN
C3	PIN 7	4	BLK	11	GND - COLOR #1
C4	PIN 6	4	RED	11	VCC_R - CTO
D4	PIN 4	4	RED/BLK	11	VCC_R - DIMMER
A2	PIN 3	3	WHT/RED	12	SENSE - MAGENTA
B2	PIN 1	3	WHT	12	SENSE - AMBER
C2	PIN 4	3	RED/WHT	12	VCC_R - MAGENTA
D2	PIN 5	3	BLK	12	GND - COLOR #2
D3	PIN 2	3	RED	12	VCC_R - AMBER
A1	PIN 1	2	RED	13	VCC_R - FXD
B1	PIN 2	2	WHT/GRN	13	SENSE - FXD
C1	PIN 3	2	BLK	13	GND - COLOR #3

Figure 3-49: Color Interconnect PCB Assembly Wire Chart - VL3500 Only

Color Interconnect (Quiet) PCB/Cable Assembly

25.9678.1419 Rev A (VL3500Q Only)

Refer to Figure 3-50 and Figure 3-51

No.	Item	Qty.	UM.	Description
1	24.9678.0409	1	EA	PCB ASSY, COLOR INTERCONNECT
2	28.9678.0419	1	EA	WIRE KIT, COLOR INTERCONNECT
-	- 04.9678.0409.00	1	EA	LABEL SET, COLOR HARNESS
-	- 11.9678.0409	1	EA	PCB, COLOR INTERCONNECT
-	- 52.6467.0003	1	EA	CONN, FEM PLUG 3POS 30-24 AWG
-	- 52.6467.0005	1	EA	CONN, FEM PLUG 5POS 30-24AWG
-	- 52.6467.0007	1	EA	CONN, FEM PLUG 7POS 30-24AWG
-	- 52.6467.0024	19	EA	CONTACT, SOCKET 30-24AWG CRIMP
-	- 52.6661.0006	5	EA	CONN, RECEPT 6CIR WIRE TO
-	- 52.6467.0011	1	EA	CONN, FEM PLUG 11 POS 30-24AWG
	- 52.6523.0004	2	EA	CONN., HOUSING 4 POS PLUG
	- 52.8347.0001	8	EA	CONTACT, 24-30AWG MALE CRIMP
-	- 52.8387.0001	20	EA	CONTACT, 26-28AWG FEMALE CRIM
-	- 55.2186.0002	11	EA	CABLE TIE, .09"WD 3.750"LG TEF
-	- 73.2326.0123	17.34	FT	WIRE, 26AWG 4COND 300V200C TEF
-	- 73.2326.7001	2.01	FT	WIRE, 26AWG 7COND 300V 200C TE
-	- 73.2326.5001	1.30	FT	WIRE, 26AWG 5COND 300V 200C TE
-	- 73.2326.3003	1.04	FT	WIRE, 26AWG 3COND 300V 200C TEF

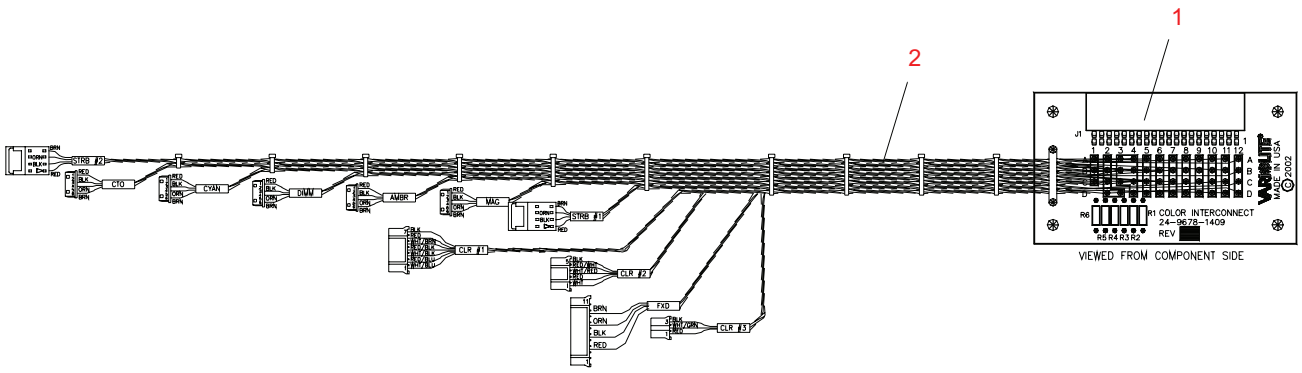
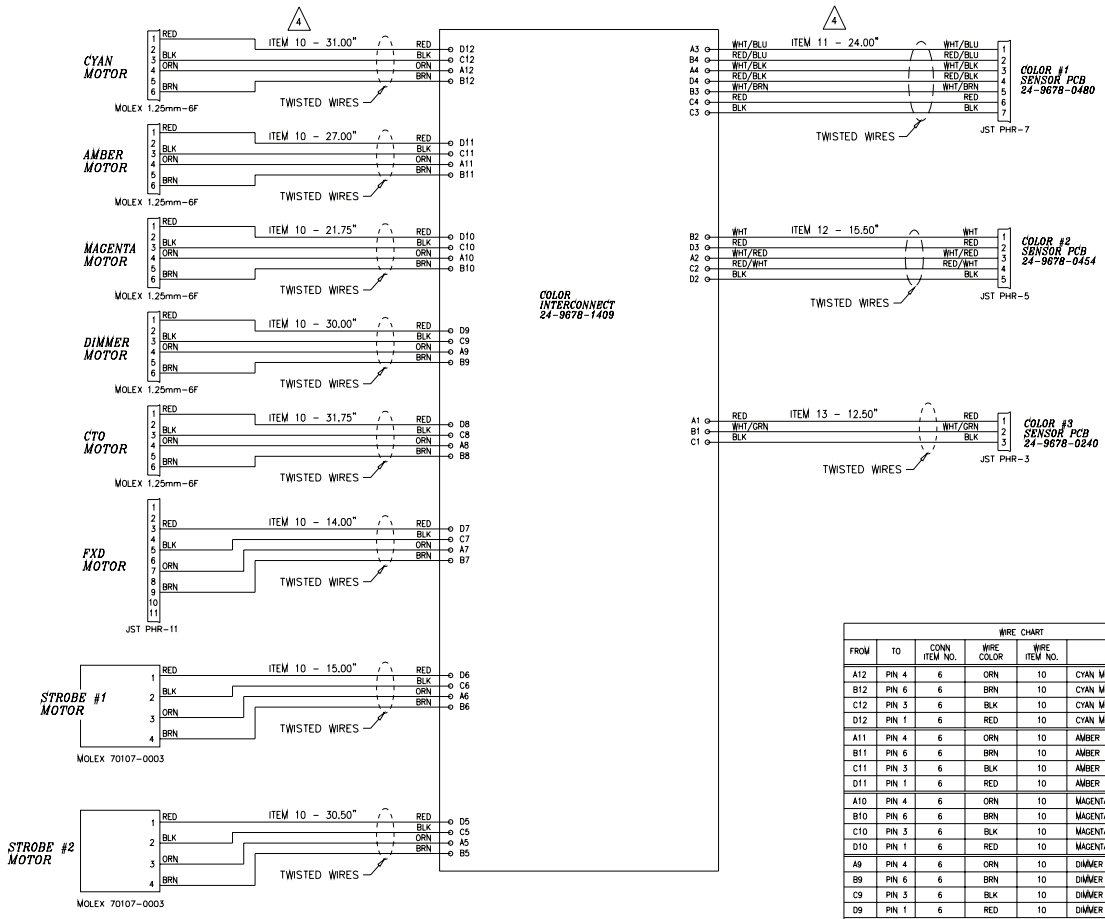


Figure 3-50: Color Interconnect PCB/Cable Assembly - VL3500Q Only

Color Interconnect PCB/Cable Assembly (continued)



WIRE CHART					
FROM	TO	CONN ITEM NO.	WIRE COLOR	WIRE ITEM NO.	FUNCTION
A12	PIN 4	6	ORN	10	CYAN MOTOR - 2A
B12	PIN 6	6	BRN	10	CYAN MOTOR - 2B
C12	PIN 3	6	BLK	10	CYAN MOTOR - 1B
D12	PIN 1	6	RED	10	CYAN MOTOR - 1A
A11	PIN 4	6	ORN	10	AMBER MOTOR - 2A
B11	PIN 6	6	BRN	10	AMBER MOTOR - 2B
C11	PIN 3	6	BLK	10	AMBER MOTOR - 1B
D11	PIN 1	6	RED	10	AMBER MOTOR - 1A
A10	PIN 4	6	ORN	10	MAGENTA MOTOR - 2A
B10	PIN 6	6	BRN	10	MAGENTA MOTOR - 2B
C10	PIN 3	6	BLK	10	MAGENTA MOTOR - 1B
D10	PIN 1	6	RED	10	MAGENTA MOTOR - 1A
A9	PIN 4	6	ORN	10	DIMMER MOTOR - 2A
B9	PIN 6	6	BRN	10	DIMMER MOTOR - 2B
C9	PIN 3	6	BLK	10	DIMMER MOTOR - 1B
D9	PIN 1	6	RED	10	DIMMER MOTOR - 1A
A8	PIN 4	6	ORN	10	CTO MOTOR - 2A
B8	PIN 6	6	BRN	10	CTO MOTOR - 2B
C8	PIN 3	6	BLK	10	CTO MOTOR - 1B
D8	PIN 1	6	RED	10	CTO MOTOR - 1A
A7	PIN 7	7	ORN	10	FXD MOTOR - 2A
B7	PIN 9	7	BRN	10	FXD MOTOR - 2B
C7	PIN 5	7	BLK	10	FXD MOTOR - 1B
D7	PIN 3	7	RED	10	FXD MOTOR - 1A
A6	PIN 7	7	ORN	10	STROBE #1 MOTOR - 2A
B6	PIN 9	7	BRN	10	STROBE #1 MOTOR - 2B
C6	PIN 5	7	BLK	10	STROBE #1 MOTOR - 1B
D6	PIN 3	7	RED	10	STROBE #1 MOTOR - 1A
A5	PIN 7	7	ORN	10	STROBE #2 MOTOR - 2A
B5	PIN 9	7	BRN	10	STROBE #2 MOTOR - 2B
C5	PIN 5	7	BLK	10	STROBE #2 MOTOR - 1B
D5	PIN 3	7	RED	10	STROBE #2 MOTOR - 1A
A3	PIN 1	4	WHT/BLU	11	SENSE - CYAN
A4	PIN 3	4	WHT/BLK	11	SENSE - DIMMER
B3	PIN 5	4	WHT/BRN	11	SENSE - CTO
B4	PIN 2	4	RED/BLU	11	VCC_R - CYAN
C3	PIN 7	4	BLK	11	GND - COLOR #1
C4	PIN 6	4	RED	11	VCC_R - CTO
D4	PIN 4	4	RED/BLK	11	VCC_R - DIMMER
A2	PIN 3	3	WHT/RED	12	SENSE - MAGENTA
B2	PIN 1	3	WHT	12	SENSE - AMBER
C2	PIN 4	3	RED/WHT	12	VCC_R - MAGENTA
D2	PIN 5	3	BLK	12	GND - COLOR #2
D3	PIN 2	3	RED	12	VCC_R - AMBER
A1	PIN 1	2	RED	13	VCC_R - FXD
B1	PIN 2	2	WHT/GRN	13	SENSE - FXD
C1	PIN 3	2	BLK	13	GND - COLOR #3

Figure 3-51: Color Interconnect PCB Assembly Wire Chart - VL3500Q Only

VL3500 Controller PCB Assembly

24.9678.4730 Rev F

Refer to Figure 3-52

Note: Available only as an assembly. Includes 24.9678.3732, Motor Driver (Piggy Back) PCB.

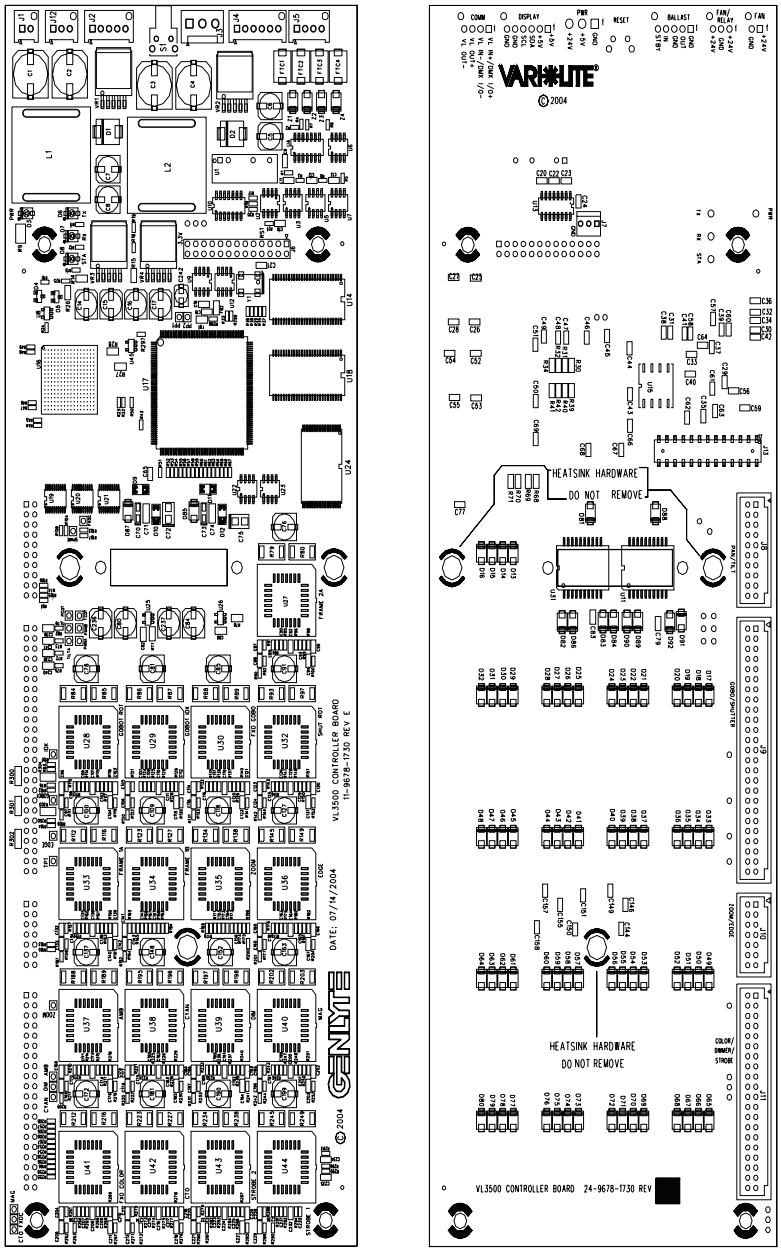


Figure 3-52: VL3500 Controller PCB

Motor Driver (Piggy Back) PCB

24.9678.1732 Rev C

Refer to Figure 3-53

Note: Available only as an assembly. Included with 24.9678.4730, VL3500 Controller PCB Assembly.

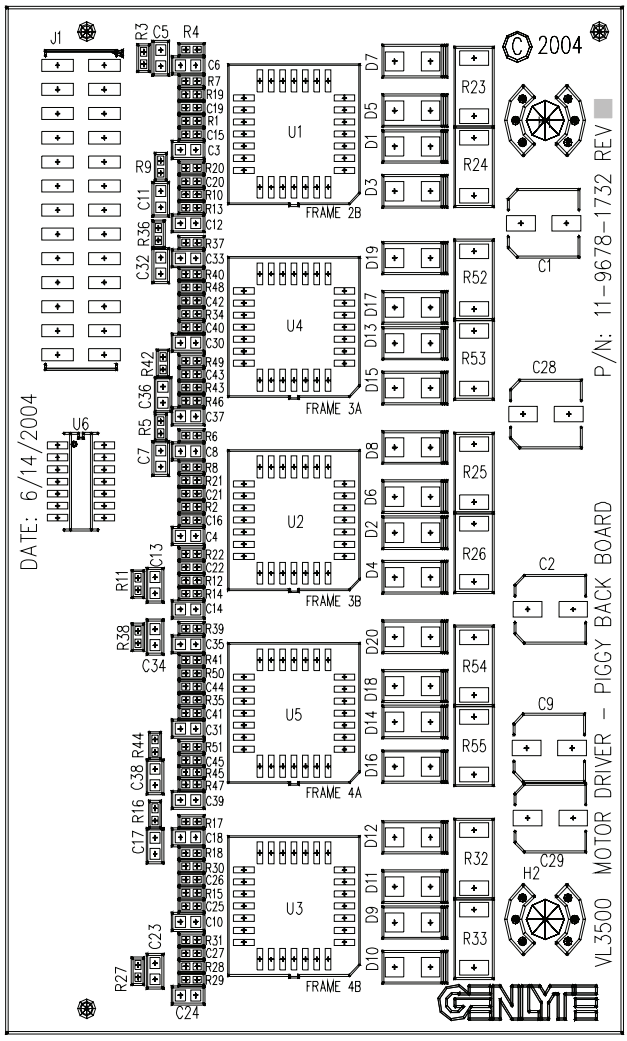


Figure 3-53: Motor Driver (Piggy Back) PCB

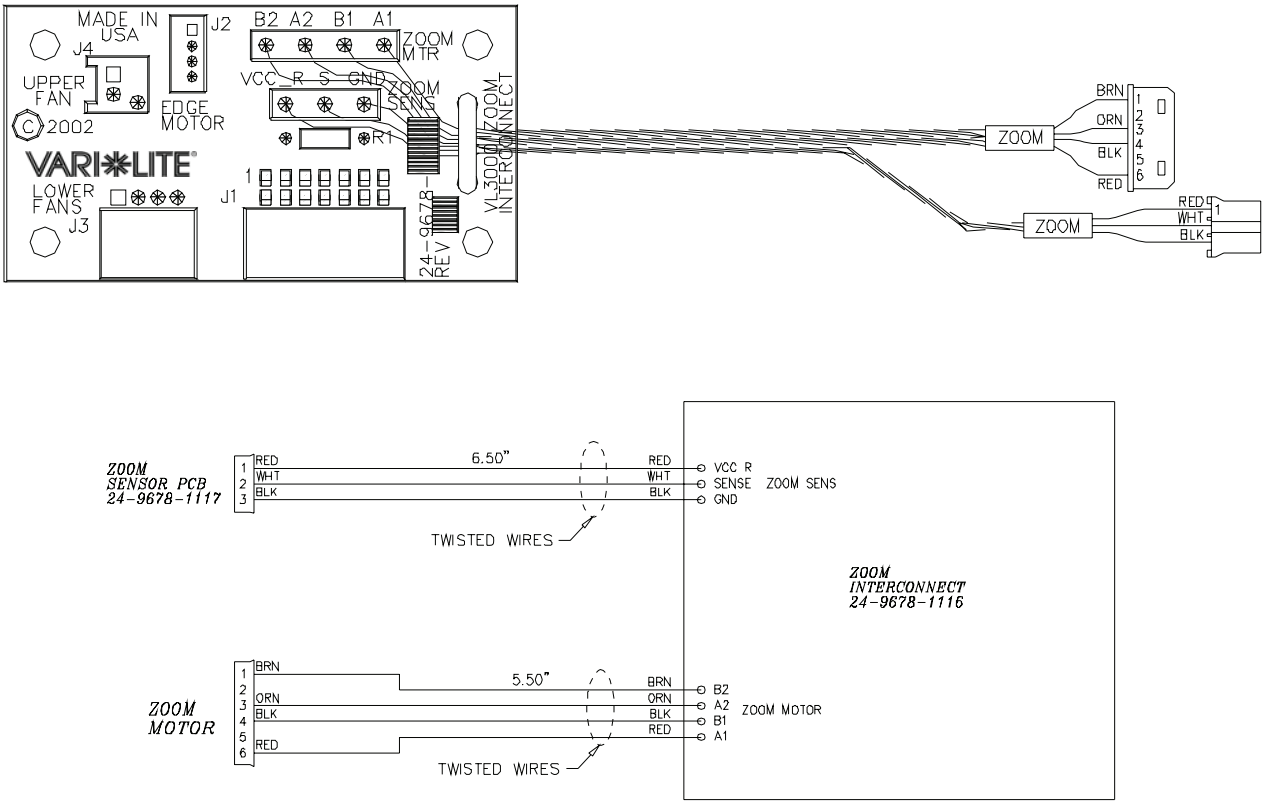
Arc Zoom Interconnect PCB Assembly

24.9678.1116 Rev 0

Refer to Figure 3-54

Ref.	Item	Qty.	UM.	Description
-	04.9678.1116.00	1	EA	LABEL SET ZOOM HARNESS
-	11.9678.1116	1	EA	PCB ZOOM INTERCONNECT
J3	52.6259.0004	1	EA	HDR 4POS NT\MTA100 SD RT ANG
J4	52.6260.0003	1	EA	HEADER, 2POS MTA-100 SHROUDED
J2	52.6447.0009	1	EA	HEADER, SHROUDED 4 POSITION
	52.6467.0003	1	EA	CONN, FEM PLUG 3POS 30-24AWG
	52.6467.0024	3	EA	CONTACT, SOCKET 30-24AWG CRIMP
J1	52.6598.0028	1	EA	HDR 14P 2ROW AMP MODU R/A
	52.6662.0006	1	EA	HOUSING, 6POS 125V/2A 2.00
	52.8388.0001	4	EA	CONTACT, 24-30AWG FEMALE CRI
	55.2186.0001	1	EA	CABLE TIE, .10"WD 4.00"LG SMALL
R1	60.1425.2703	1	EA	RES, 1/4W 5% 270.0 OHM CF
	73.2324.0029	.54	FT	WIRE, 24AWG 3CD TW 300V 200C
	73.2324.0123	.46	FT	WIRE, 24AWG 4CD TW 300V 200C

Zoom Interconnect PCB Assembly (continued)



WIRE CHART					
FROM	TO	CONN ITEM NO.	WIRE COLOR	WIRE ITEM NO.	FUNCTION
A1 – ZOOM MTR	PIN 6	10	RED	14	ZOOM MOTOR – 1A
B1 – ZOOM MTR	PIN 4	10	BLK	14	ZOOM MOTOR – 1B
A2 – ZOOM MTR	PIN 3	10	ORN	14	ZOOM MOTOR – 2A
B2 – ZOOM MTR	PIN 1	10	BRN	14	ZOOM MOTOR – 2B
VCC_R – ZOOM SENS	PIN 1	6	RED	16	VCC_R – ZOOM SENSOR
S – ZOOM SENS	PIN 2	6	WHT	16	SENSE – ZOOM SENSOR
GND – ZOOM SENS	PIN 3	6	BLK	16	GND – ZOOM SENSOR

Figure 3-54: Arc Zoom Interconnect PCB Assembly

Notes

Enclosure Assembly

Upper Enclosure Assembly

21.9678.0800.02 Rev NN (VL3500 Only)
21.9678.0801.02 Rev Z (VL3500Q Only)

Refer to Figure 3-55 and Figure 3-56

No.	Item	Qty.	UM.	Description
1	04.9640.0374	1	EA	LABEL, P.E. GROUND
2	04.9661.1218.01	1	EA	LABEL, PATENT, VL2201 & VL2400 SERIES LUM.
3	04.9678.0040.01	1	EA	LABEL, VL3000 COMPLIANCE
	04.9678.0045	1	EA	LABEL, VL3000 COMPLIANCE, VL3500 QUIET
4	06.6032.0009	1	EA	CABLE MARKER TIE, WHITE 19 X 7
5	10.9661.1258	1	EA	BRACKET, APS SIDE
6	10.9661.1358	1	EA	AIR SEAL, DUCT
7	10.9678.0820	1	EA	LANYARD, PAN TUBE
8	10.9686.0839	2	EA	COVER, TOP
9	10.9686.0846	2	EA	HANDLE, CAST ENCLOSURE
10	10.9678.0869	1	EA	BRACKET, LVS
11	10.9678.0886	1	EA	SPACER, PAN BEARING 0.235" THK
12	10.9678.0892	1	EA	BUSHING, WIRE PROTECTION PAN
13	10.9678.1876	1	EA	AIR DIST PLENUM, 1200W S W BALLAST P/S
14	12.9686.1236	2	EA	MACHINED, COVER FRONT
15	12.9686.1238	2	EA	MACHINED, COVER SIDE
16	12.9678.0842	1	EA	AIR DUCT, UPPER ENCLOSURE MOD
17	12.9678.1862	1	EA	SHIELDED BALLAST, CCI
18	21.9678.1254	1	EA	ASSY, COVER - VENTILATION
	21.9686.0840.02	1	EA	ASSY, COVER - VENT, VL3500 QUIET, ALUMINUM (**not shown**)
19	21.9678.0767	1	EA	ASSY, STABILIZER
19a	- 10.9678.0757	1	EA	STABILIZER, 1.377DIA
19b	- 10.9678.0762	1	EA	BRACKET, STABLIZER
19c	- 53.6610.0003	1	EA	SCREW, 6-32 X 7/16" PPZ
19d	- 55.6568.0075	1	EA	SPRING, EXTSN 0.375" OD 1.00" LG 0.041" WIRE DIA
20	21.9678.0805	1	EA	ASSY, PANEL
21	21.9678.0807	1	EA	ASSY, PAN PULLEY

No.	Item	Qty.	UM.	Description
22	21.9678.0864	1	EA	ASSY, PAN MOTOR
23	21.9678.0881	1	EA	ASSY, PAN TUBE
24	22.9678.0851	1	EA	ASSY, UPPER ENCLOSURE
25	23.9678.0686	1	EA	FAN ASSY, UPPER ENCLOSURE
26	23.9678.0687	1	EA	ELEC ASSY, PAN EOT SENSOR
-	25.9661.1514	1	EA	CABLE ASSY, LVS CHASSIS GND (**not shown**)
-	25.9661.1520	1	EA	CABLE ASSY, CHASSIS TO YOKE GND (**not shown**)
-	25.9678.0811	1	EA	CABLE ASSY, EMI FILTER TO POWER (**not shown**)
-	25.9678.0812	1	EA	CABLE ASSY, AC INPUT SPLITTER (**not shown**)
-	25.9678.0813	1	EA	CABLE ASSY, DATA I/O LINK (**not shown**)
-	25.9678.0816	1	EA	CABLE ASSY, BALLAST TO CONTROL (**not shown**)
-	25.9678.0818	1	EA	CABLE ASSY, PAN/TILT CONTROL (**not shown**)
-	25.9678.0821	1	EA	CABLE ASSY, DC OUTPUT (**not shown**)
-	25.9678.1825	1	EA	CABLE ASSY, DISPLAY (**not shown**)
-	25.9678.0829	1	EA	CABLE ASSY, LAMP SUPPLY TO RELAY (**not shown**)
-	25.9678.0843	1	EA	CABLE ASSY, AC FAN LVS TO YOKE (**not shown**)
-	25.9678.1716	1	EA	CABLE ASSY, LVS CHASSIS GROUND (**not shown**)
27	52.8295.0002	1	EA	TERMINAL STRIP, 300V 12AWG 20A
28	53.2001.0003	1	EA	NUT, 10-32 NYLON INSERT
29	53.2019.0004	4	EA	NUT, 3/8-16 X 7/32" THK HEX
30	53.2200.0006	4	EA	NUT, 6-32 KEPS SS
31	53.6505.0022	3	EA	BOLT, 3/8-16 X 3/4"LG CARR
32	53.6513.0044	3	EA	SCREW, M5 X 10MM STL CUP PT
33	53.6515.0001	4	EA	SCREW, 10-32 X 3/4" SCB CAP
34	53.6522.0001	1	EA	SCREW, 6-32 X 1/4" PPZ
35	53.6522.0004	2	EA	SCREW, 6-32 X 1/4" SOC HD
36	53.6525.0188	2	EA	SCREW, 6-32 X 3/16" PPZ SEMS
37	53.6530.0023	2	EA	RIVET, 1/8"OD POP .376-.500GRP
38	53.6539.0001	4	EA	WASHER, 3/8" SPLIT LOCK
39	53.6545.0003	4	EA	SCREW, 8-32 X 3/8" PFZ
40	53.6545.0004	4	EA	SCREW, 8-32 X 3/8" PPZ
41	53.6556.0002	1	EA	SCREW, 4-40 X 3/4"LG
42	53.6558.0009	13	EA	SCREW, 6-32 X 3/8"LG PPZ SEMS
43	53.6558.0010	11	EA	SCREW, 6-32 X 1/4"LG PPZ BLACK
44	53.6558.0015	4	EA	SCREW, 6-32 X 3/8" PPB SEMS EXT
45	53.6571.0003	1	EA	SCREW, 6-32 X 1-1/2"LG PPB
46	53.6591.0001	2	EA	SCREW, 6-32 X 1/4" PFZ
47	53.6609.0001	4	EA	SCREW, 6-32 X 3/8" PFZ

No.	Item	Qty.	UM.	Description
48	53.6626.0001	1	EA	SCREW, 10-32 X 1/2" PPZ
49	53.6634.1000	1	EA	SCREW, 3/8-16 X 1.00" LG SOC
50	53.6653.0502	4	EA	SCREW, 1/4-20 X 1/2"LG SOC (**VL3500 Only**)
51	54.1206.0014	2	EA	RING, RETAINING
52	54.1255.0001	1	EA	BEARING ASSY, BLACK FLUSH MOU
53	54.2055.0001	1	EA	BELT, TIMING S2M 210GROOVE 9MM
54	55.2150.0003	2	EA	STANDOFF, 1/4"HEX 6-32 1.125"L
55	55.2178.0001	3	EA	CABLE ANCHOR MOUNT, #8 SCREW
56	55.2179.0001	3	EA	CABLE ANCHOR MOUNT, #6 SCREW
57	55.2186.0001	5	EA	CABLE TIE, 0.10" WD 4.00" LG SMALL (**not shown**)
58	55.2261.0001	1	EA	SLEEVE, NYLON THIN WALL #6 SCR
59	55.2267.0001	2	FT	RUBBER STRIP, SPONGE CLSD CELL
60	55.6677.0039	4	EA	WASHER, 0.438" OD X 0.219" ID X 0.040" THK
61	55.6532.0004	2	EA	BRACKET, 6-32 THREADED HOLES
62	55.6543.0001	0.312	FT	GROMMET STRIP, SERRATED .062"
63	55.6543.0002	1.54	FT	GROMMET STRIP, SERRATED .125"
64	55.6549.0001	4	EA	WASHER, 1/4" SPLIT LOCK
65	55.6568.0074	2	EA	SPRING, CPRSN .420"OD .750"LG 0.055" DIA WIRE
66	55.6575.0001	4	EA	SCREW, 10-32 X 3/4" PPB
67	55.6577.0005	2	EA	STANDOFF, 1/2" HEX 6-32 X 1.625" L
68	55.6580.0002	2	EA	CABLE TIE, 0.18" WD 8.0" LG
69	55.2132.0012	1	EA	STANDOFF, 1/4" HEX 6-32 X 3/4" LG
70	55.6677.0044	1	EA	WASHER, .877"OD.170"ID.093"THK
71	55.6699.0010	0.50	FT	SLEEVING, 5/16" NOM DIA WOVEN POLY ROUNDIT
72	55.6775.0009	1	EA	BUSHING, SNAP .750"ID 1"MT H
73	67.4018.0001	1	EA	FERRITE, 26 X 28.5 X 13MM CYL
74	67.4021.0002	1	EA	FILTER, EMI, CCI
75	68.9678.0827	1	EA	CHOKE, COMMON MODE
76	69.3176.0201	1	EA	POWER SUPPLY, 200W +24V/8.5A WMTH PLT (LAMBDA)
77	55.6799.0001	AR	EA	PAN TUBE BEARING SHIM, 1.375" ID 1.875" OD, 0.005" THK (**not shown**)
78	55.6799.0002	AR	EA	PAN TUBE BEARING SHIM, 1.375" ID 1.875" OD, 0.010" THK(**not shown**)

AR = As Required

Upper Enclosure Assembly (continued)

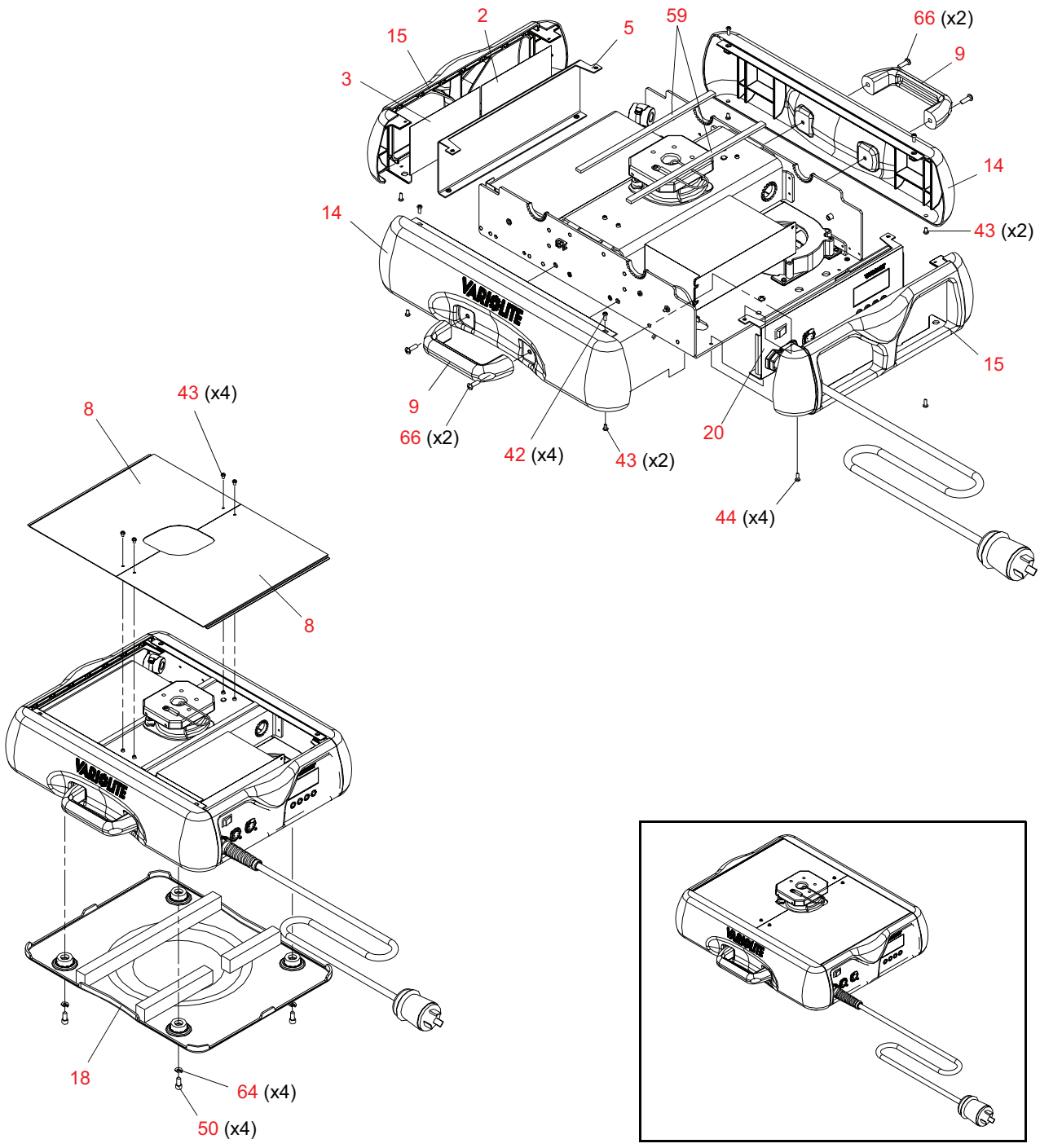


Figure 3-55: Upper Enclosure Assembly Part 1

Upper Enclosure Assembly (continued)

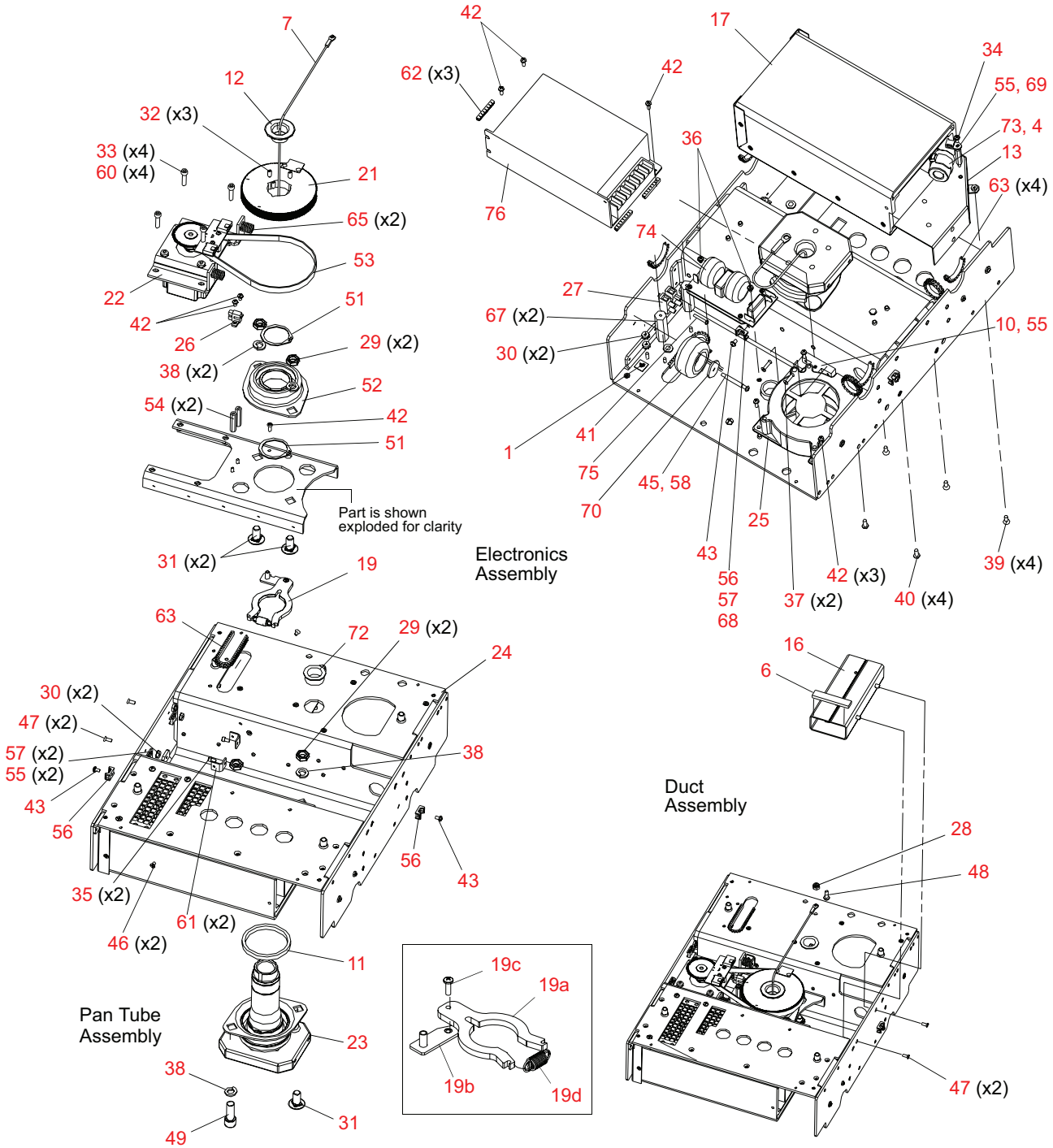


Figure 3-56: Upper Enclosure Assembly Part 2

Ventilation Cover Assembly - Standard

21.9678.1254 Rev 0

Refer to Figure 3-57

No.	Item	Qty.	UM.	Description
1	10.9661.1249	4	EA	POST, TRUSS HOOK
2	10.9678.8350	1	EA	COVER, VENTILATION
3	10.9678.0893	1	EA	12" AIR SEAL, UPPER ENCLOSURE
4	10.9678.0894	1	EA	6" AIR SEAL, UPPER ENCLOSURE
5	10.9678.0896	1	EA	4.5" AIR SEAL, UPPER ENCLOSURE
6	54.1206.0015	4	EA	RING, RETAINING, PRESS-ON, 1" SH

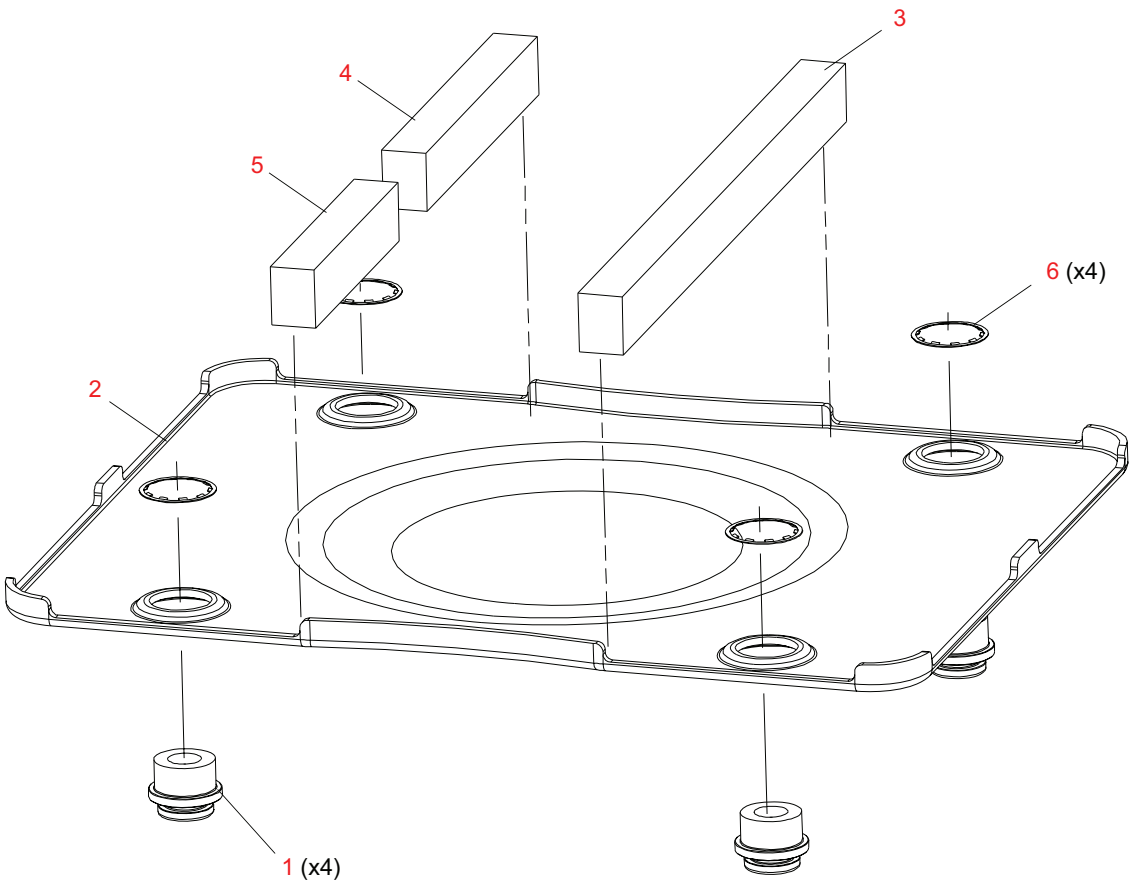


Figure 3-57: Ventilation Cover Assembly - Standard

Ventilation Cover Assembly - VL3500 Quiet

21.9686.0840.02 Rev B (VL3500Q)

Refer to Figure 3-58

No.	Item	Qty.	UM.	Description
1	10.9686.1249	4	EA	POST, TRUSS HOOK
1a	10.9678.0850	4	EA	POST, TRUSS HOOK, SHORT, EARLY PRODUCTION
1b	10.9678.0833	4	EA	SPACER, 1.25 ", EARLY PRODUCTION
2	10.9686.0883	1	EA	COVER, VENTILATION
3	10.9678.0837	1	EA	AIR SEAL, FAN SIDE
4	10.9678.0838	1	EA	AIR SEAL, APS SIDE
5	10.9678.0835	1	EA	AIR SEAL, SHORT STRIP
6	10.9678.0836	1	EA	AIR SEAL, LONG STRIP
7	10.9678.0887	2	EA	RAIN COVER SOUND INSULATION, ALUMINUM COVER
8	53.6653.0027	4	EA	SCREW, 1/4-20 X 1 5/8 SOC HEAD
9	54.1206.0015	4	EA	RING, RETAINING, PRESS-ON, 1" SH
10	55.6549.0001	4	EA	WASHER, 1/4" SPLIT LOCK

Ventilation Cover Assembly - VL3500 Quiet (continued)

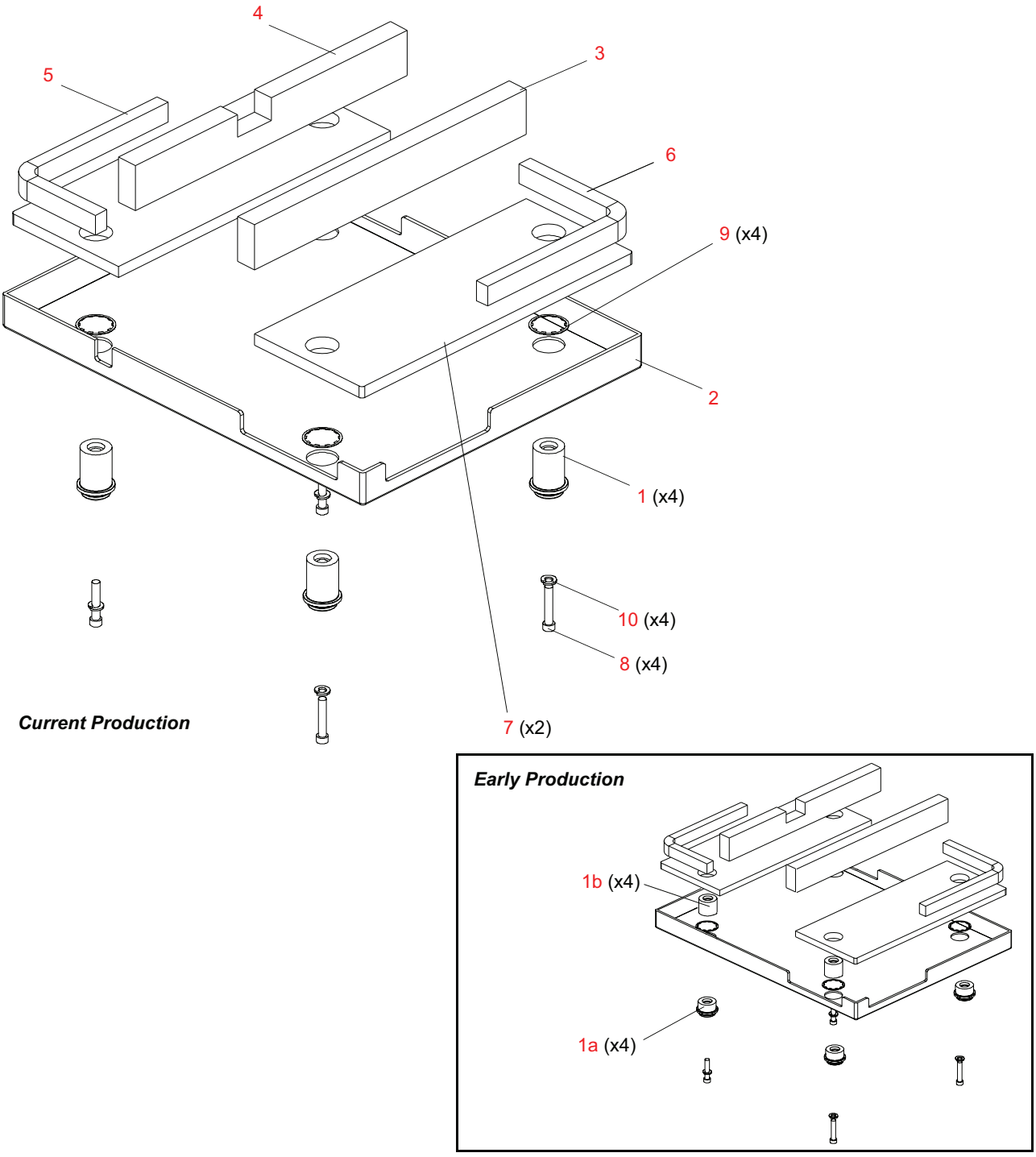


Figure 3-58: Ventilation Cover Assembly - VL3500 Quiet

Panel Assembly

21.9678.0805 Rev N

Refer to Figure 3-59

No.	Item	Qty.	UM.	Description
1	10.9678.0852.01	1	EA	LAYOUT, ENCLOSURE OVERLAY
2	10.9678.0859	1	EA	BRACKET, INPUT
3	10.9678.0872	1	EA	STIFFENER, DISPLAY BOARD
4	10.9686.0820	1	EA	FILLER PANEL, DMX CONNECTOR
5	24.9663.3895	1	EA	PCB ASSY, DMX INPUT
6	25.9678.0810	1	EA	CABLE ASSY, AC INPUT PIGTAIL
7	24.9678.3825	1	EA	PCB ASSY, VL3000 DISPLAY
8	51-0541	4	EA	SCREW, 4- X 3/8" H/L BLK ZINC PLT
9	53.6558.0009	2	EA	SCREW, 6-32 X 3/8"LG PPZ SEMS EXT ZINC PLT
10	55.2284.0001	1	EA	CARD GUIDE, SNAP-IN 3" LONG, NYLON NATURAL
11	74.2000.0002	1	EA	SWITCH, ROCKER, 2 POLE, HIGH CURRENT, BLACK

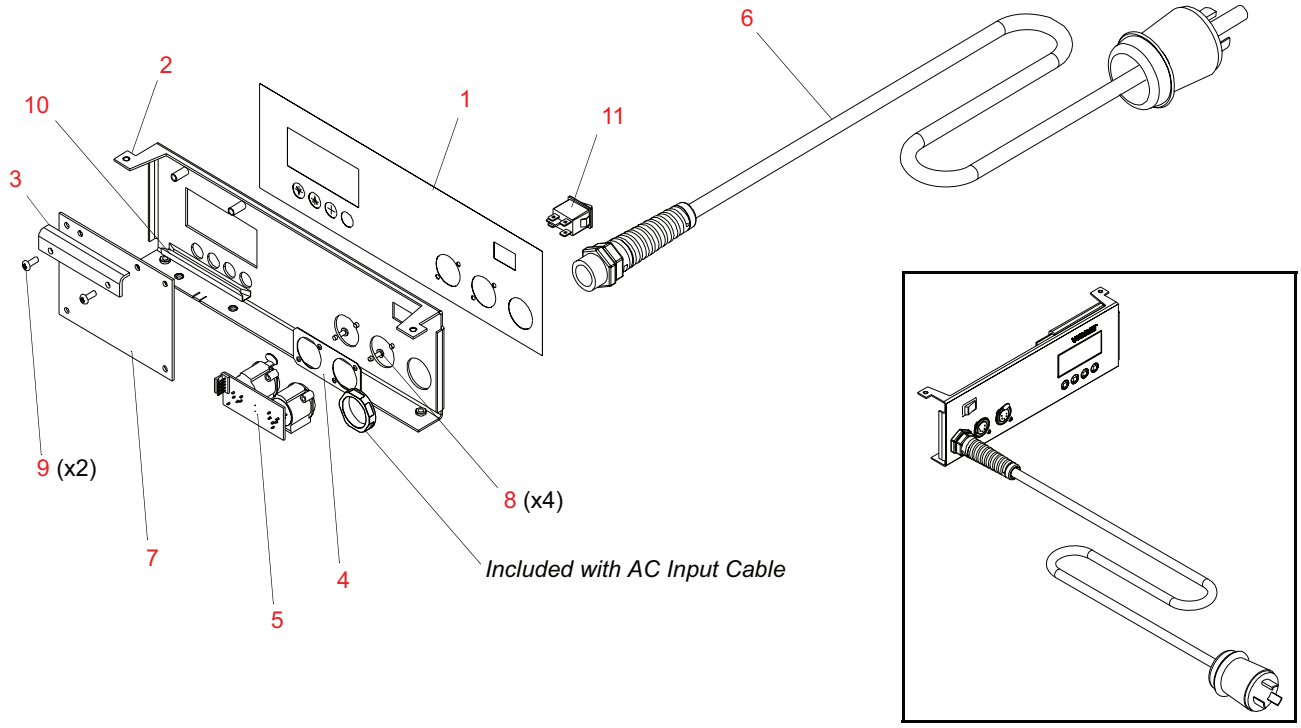


Figure 3-59: Panel Assembly

DMX Input PCB

24.9663.3895 Rev 0

Refer to Figure 3-60

No.	Item	Qty.	UM.	Description	Ref.
1	17.9663.3895	1	EA	PCB FAB, DMX INPUT	-
2	52.6259.0006	1	EA	HEADER, 5POS MTA FRCT LOK STRT POST	J3
3	52.6625.0006	1	EA	CONN, RECEPT XLR 5PIN FEMALE PC MT VERTICAL	J1
4	52.6626.0006	1	EA	CONN, RECEPT XLR 5PIN MALE PC MT VERTICAL	J2
5	62.3039.0102	1	EA	CAP, 1000P 250V 20% CDE X-Y	C1

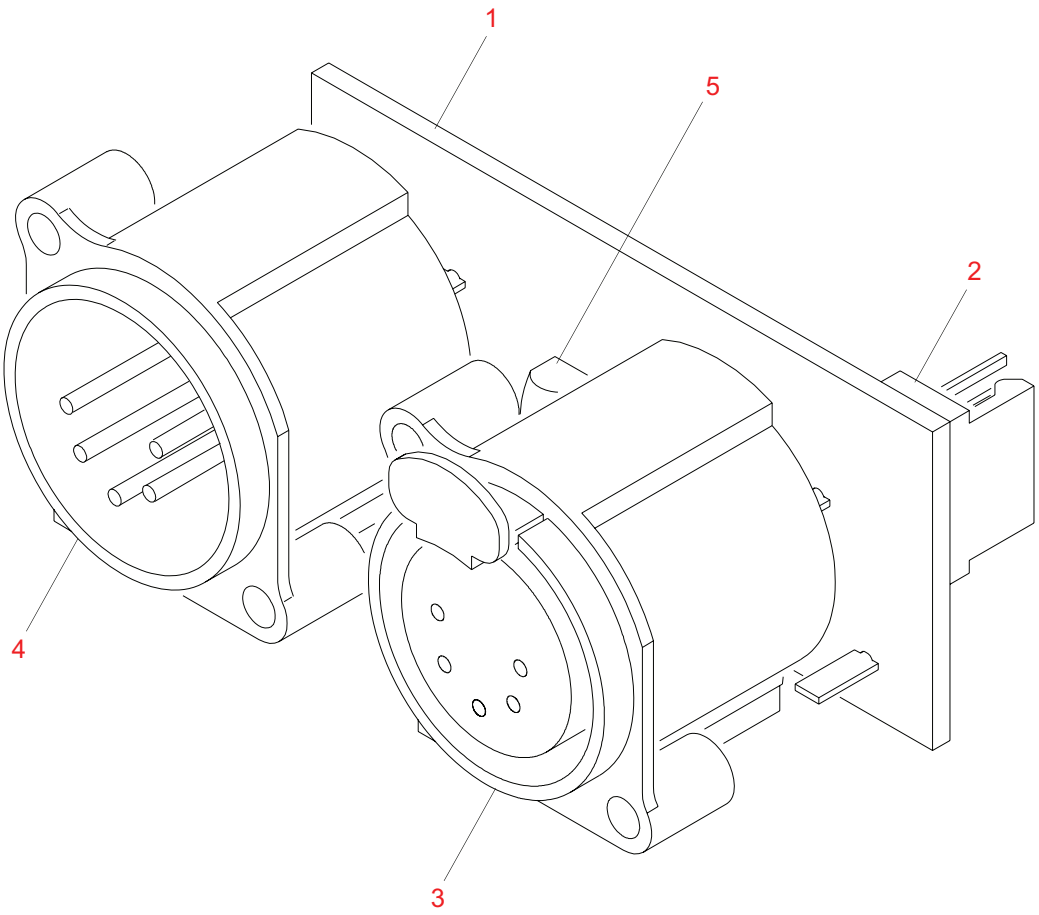


Figure 3-60: DMX Input PCB

AC Input Pigtail Cable Assembly

25.9678.0810 Rev C

Refer to Figure 3-61

No.	Item	Qty.	UM.	Description
1	52.6274.2313	1	EA	STRAIN RELIEF, SKINTOP FLEX TYPE PG13 BLK
2	52.6401.2321	1	EA	CONN, PLUG "CE MARKED" 20A 250V TWIST-LOCK MALE LINE, 3-WIRE
3	52.8231.0005	1	EA	TERM, RING #6 BLUE 16-14 AWG REEL PIDG
4	52.8298.1160	2	EA	FERRULE, WIRE 1X16 AWG L2=8MM BLACK
5	55.2268.0187	0.92	FT	HEATSHRINK, 3/16" CLEAR KYNAR UL 600V 150DEG C
6	55.2268.0500	0.13	FT	HEATSHRINK, 1/2" CLEAR KYNAR UL 600V 150DEG C
7	73.9636.0153	4.00	FT	CORDAGE, 1.5/3 750V 60C EURO BLK HD-22 11MM OD

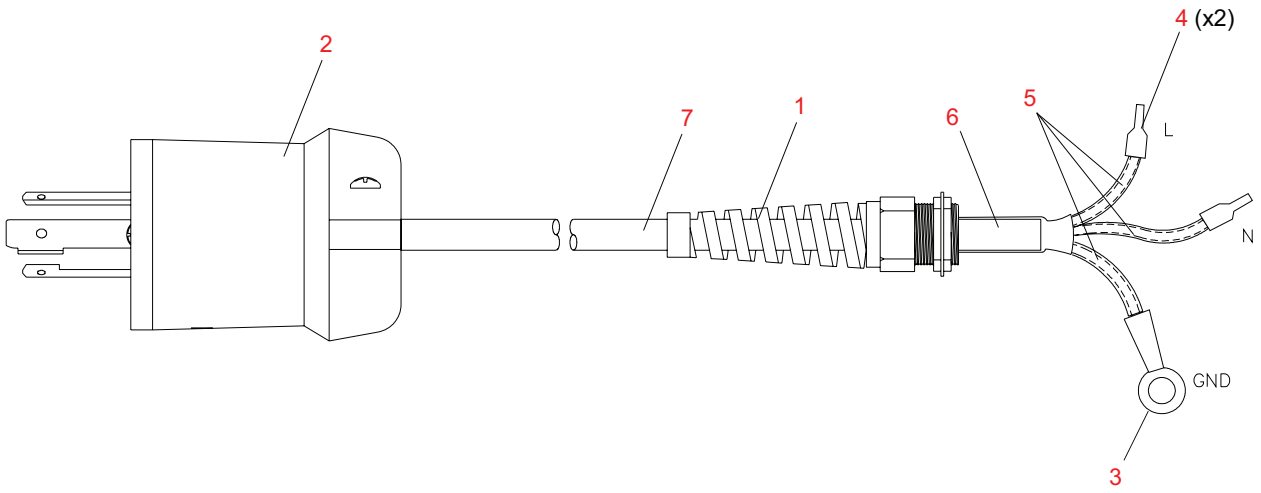


Figure 3-61: AC Input Pigtail Cable Assembly

Pan Pulley Assembly

21.9678.0807 Rev E

Refer to Figure 3-62

No.	Item	Qty.	UM.	Description
1	10.9678.0750	1	EA	TIMING PULLEY, 2MM GT 150 TOOTH
2	10.9678.0855	1	EA	PAN FLAG
3	53.6530.0009	2	EA	RIVET, 1/8"OD POP 0.126-0.187GL (changed 10-05-06)

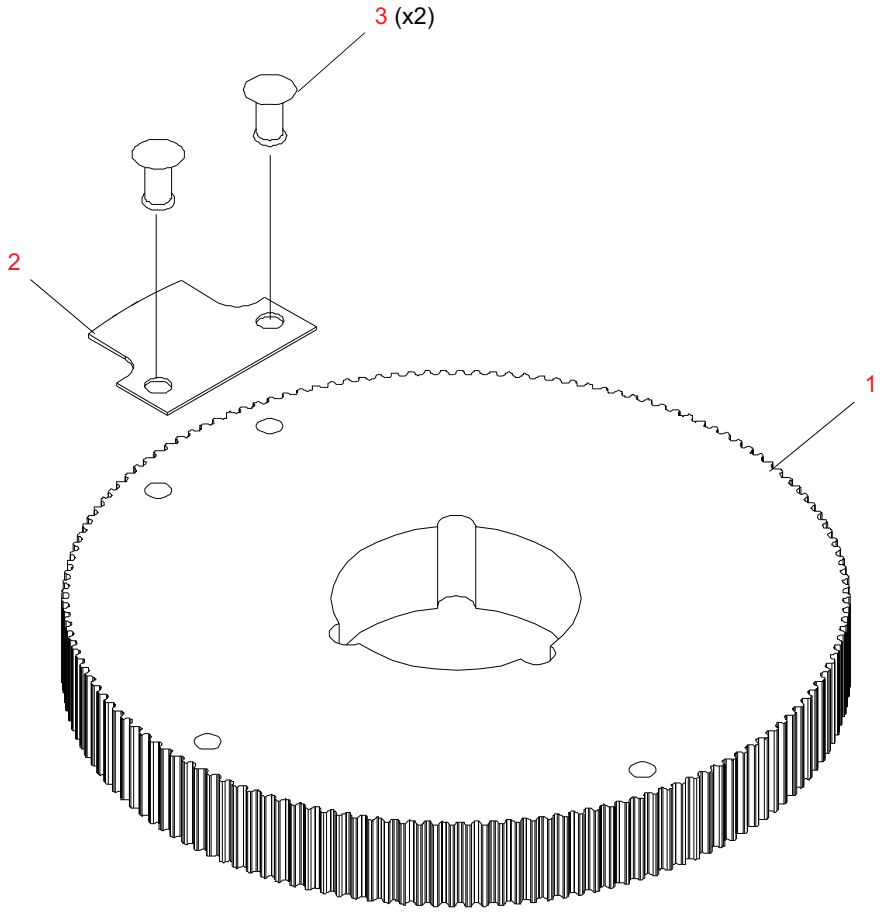


Figure 3-62: Pan Pulley Assembly

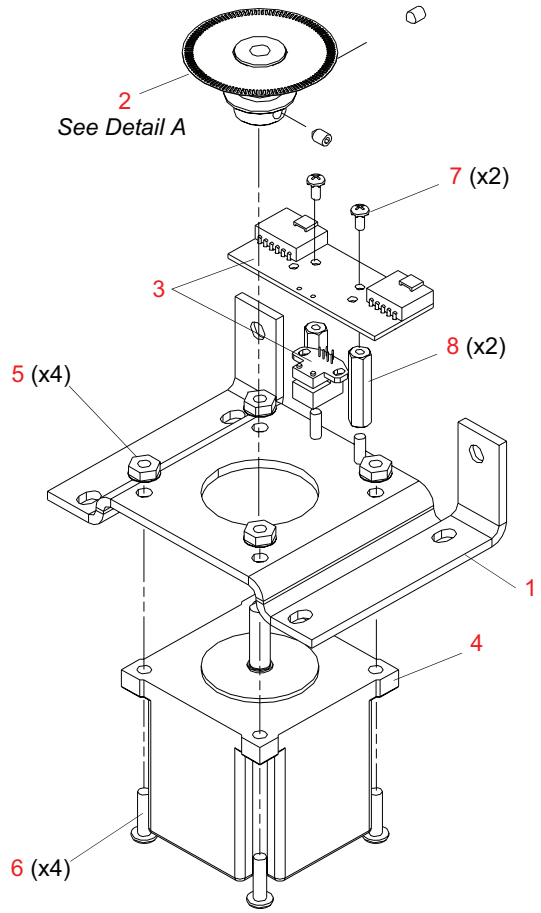
Pan Motor Assembly

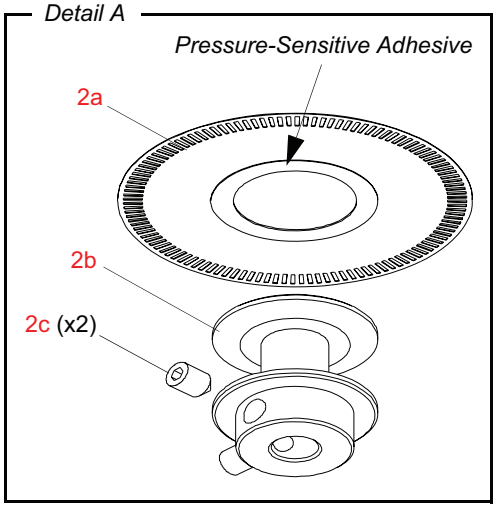
21.9678.0864 Rev E

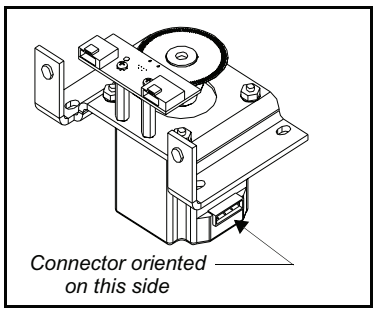
Refer to Figure 3-63

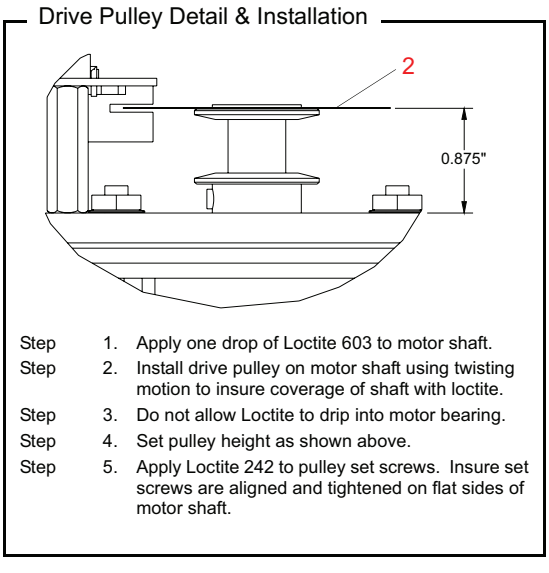
No.	Item	Qty.	UM.	Description
1	10.9678.0865	1	EA	PLATE, PAN MOTOR MOUNT
2	21.9678.0828	1	EA	ASSY, DRIVE PULLEY, PAN
	- 10.9686.8720	1	EA	CODEWHEEL, 120 COUNT LARGE ID
	- 10.9678.0749	1	EA	TIMING PULLEY, 2MM GT 17 TOOTH
	- 53.5560.0250	2	EA	SCREW, 8-32 X 1/4" SET CONE POINT
3	24.9678.9729	1	EA	PCB ASSY, VL3000 PAN ENCODER (changed 06-27-07)
4	44.9678.0680	1	EA	MOTOR, 3 PHASE SIZE 23 HIGH TORQUE
5	53.2200.0008	4	EA	NUT, 8-32 KEPS SS
6	53.6546.0001	4	EA	SCREW, 8-32 X 5/8" PPB
7	53.6682.0002	2	EA	SCREW, 4-40 X 1/4"LG PPZ SEMS-EXT
8	55.2132.0014	2	EA	STANDOFF, 1/4"HEX 4-40 1.062" LG CS (changed 05-18-06)

Pan Motor Assembly (continued)








Drive Pulley Detail & Installation
2
0.875"
Step 1. Apply one drop of Loctite 603 to motor shaft.
Step 2. Install drive pulley on motor shaft using twisting motion to insure coverage of shaft with loctite.
Step 3. Do not allow Loctite to drip into motor bearing.
Step 4. Set pulley height as shown above.
Step 5. Apply Loctite 242 to pulley set screws. Insure set screws are aligned and tightened on flat sides of motor shaft.

Note: Vari-Lite recommends that this assembly be replaced as a complete assembly. Although you can replace only the motor, the pulley (Item 2) is bonded to the motor shaft during assembly and cannot be removed intact. If you order a replacement motor (Item 4), also order the pulley (Item 2). Contact Vari-Lite Customer Service for installation information.

Figure 3-63: Pan Motor Assembly

Pan Tube Assembly

21.9678.0881 Rev 0

Refer to Figure 3-64

No.	Item	Qty.	UM.	Description
1	10.9678.0809	1	EA	PAN TOGGLE STOP
2	10.9678.0847	1	EA	SILICONE FOAM WASHER
3	10.9678.0848	2	EA	WASHER, PAN TEFLON
4	12.9678.0877	1	EA	PAN TUBE, MACHINED
5	54.1206.0021	1	EA	RING, RETAINING 1.562"SHAFT 1.468"GRV DIA .068"GRVWD EXTERNAL
6	54.1255.0002	1	EA	BEARING ASSY, FLUSH MOUNT HOUSING LARGE

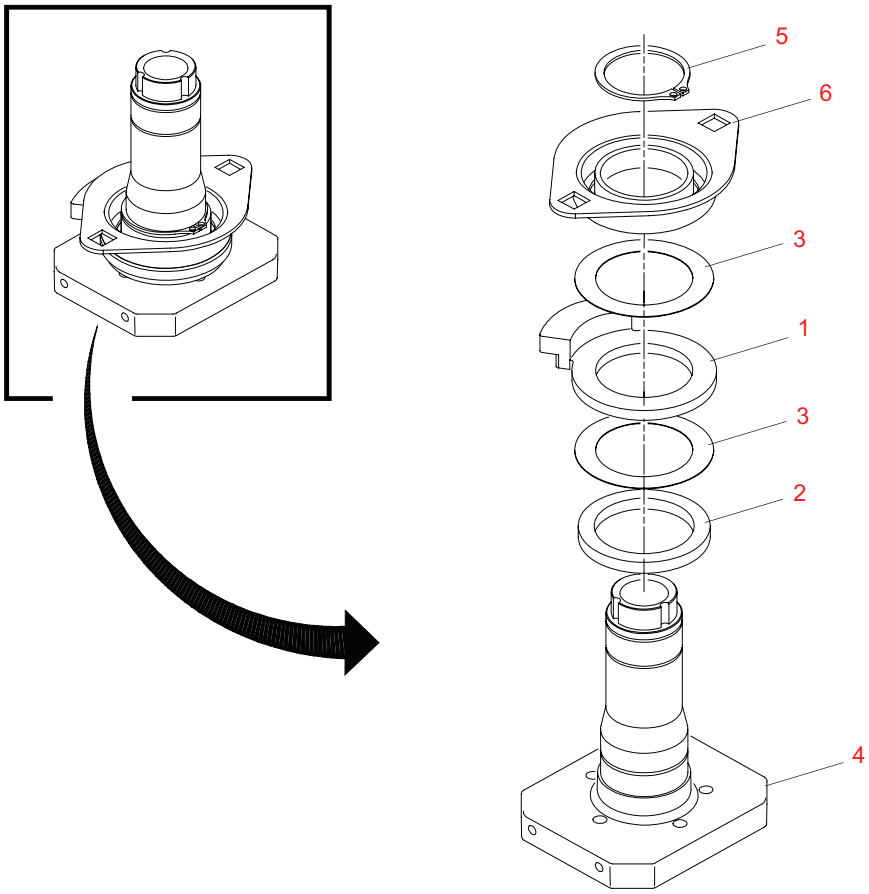


Figure 3-64: Pan Tube Assembly

Notes

Cable Assemblies

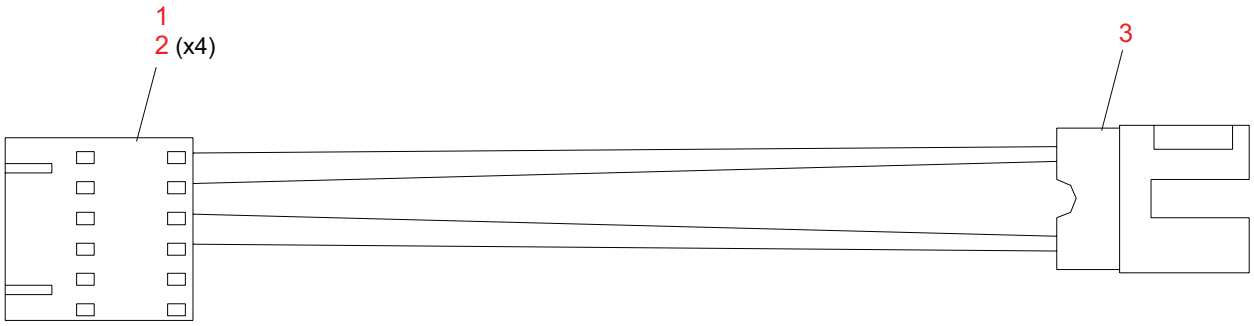
Note: Cables are only available as complete assemblies. The information contained in this section is for reference only.

Pan EOT Sensor Electrical Assembly

23.9678.0687 Rev A

Refer to Figure 3-65

No.	Item	Qty.	UM.	Description
1	52.6524.0006	1	EA	CONN, HOUSING 6 POS RECEPTACLE
2	52.8346.0001	4	EA	CONTACT, 24-30AWG FEMALE CRIMP
3	86.7002.0003	1	EA	SWITCH, SLOTTED OPTICAL



WIRE CHART		
CONNECTOR	SENSOR	DESCRIPTION
PIN 1	N.C.	NO CONNECTION
PIN 2	N.C.	NO CONNECTION
PIN 3	BLACK	IRED CATHODE
PIN 4	RED	IRED ANODE
PIN 5	GREEN	DETECTOR EMITTER
PIN 6	WHITE	DETECTOR COLLECTOR

Figure 3-65: Pan EOT Sensor Electrical Assembly

LVS Chassis Ground Cable Assembly

25.9661.1514 Rev A

Refer to Figure 3-66

No.	Item	Qty.	UM.	Description
1	52.8231.0005	1	EA	TERM, RING #6 BLUE 16-14 AWG REEL PIDG
2	52.8271.0001	1	EA	FASTON RECEPT, 16-14 AWG (REEL)
3	73.3516.0504	3.5	IN	WIRE, 16 AWG 300V 105C PVC GRN/YEL UL1569

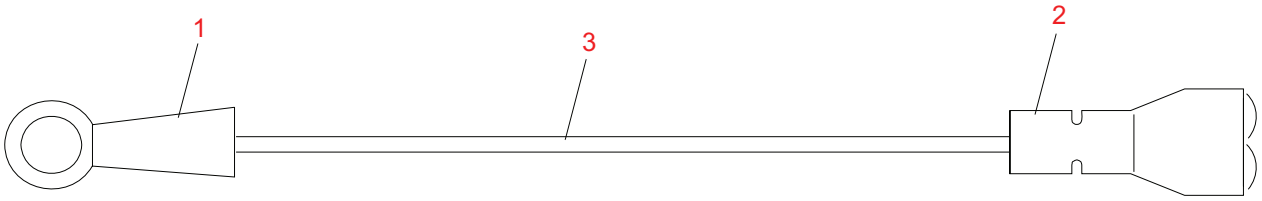


Figure 3-66: LVS Chassis Ground Cable Assembly

Chassis To Yoke Ground Cable Assembly

25.9661.1520 Rev C

Refer to Figure 3-67

No.	Item	Qty.	UM.	Description
1	52.8250.0006	2	EA	TERM, #8, RING, 10AWG
2	73.7089.0504	15.17	FT	WIRE, 22 AWG 300V 200C TEF GRN/YEL UL1180

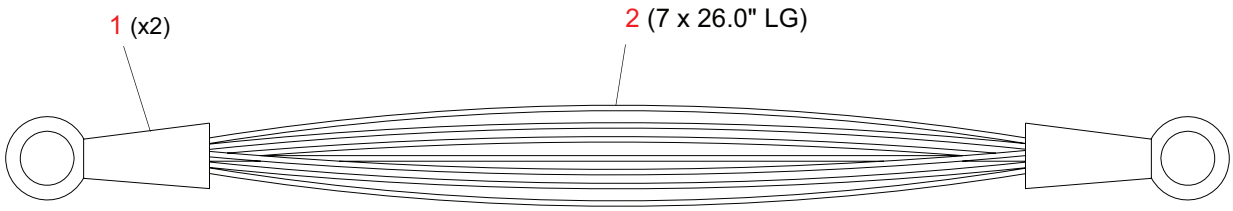


Figure 3-67: Chassis To Yoke Ground Cable Assembly

Head to Back Cap Ground Cable Assembly

25.9661.1522 Rev C

Refer to Figure 3-68.

No.	Item	Qty.	UM.	Description
1	52.8250.0014	2	EA	TERM, RING #10 16-14 AWG NON-INS. REEL
2	73.7130.0001	1.33	FT	WIRE, 7/64" TUBULAR BRAID TINNED COPPER

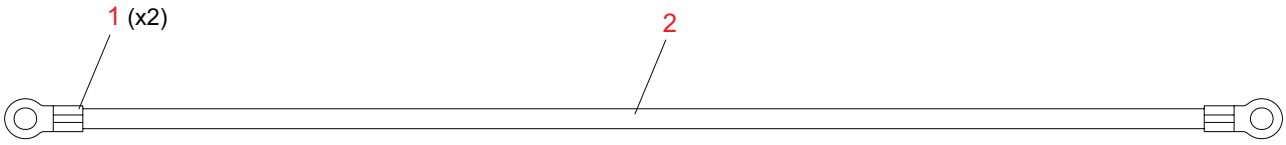


Figure 3-68: Head to Back Cap Ground Cable Assembly

Ignitor to Relay Cable Assembly

25.9661.1526 Rev C

Refer to Figure 3-69.

No.	Item	Qty.	UM.	Description
1	52.8231.0005	1	EA	TERM, RING #6 BLUE 16-14 AWG REEL PIDG (changed 03-23-06)
2	52.8312.0001	1	EA	RECP, FASTON 1/4" 18-14 AWG INSULATED VO
3	73.7101.0009	0.42	FT	WIRE, 14 AWG 15KV 150C SILICONE 41/30 STRANDING

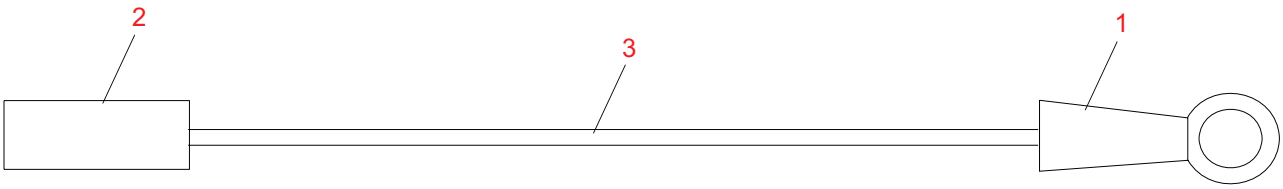


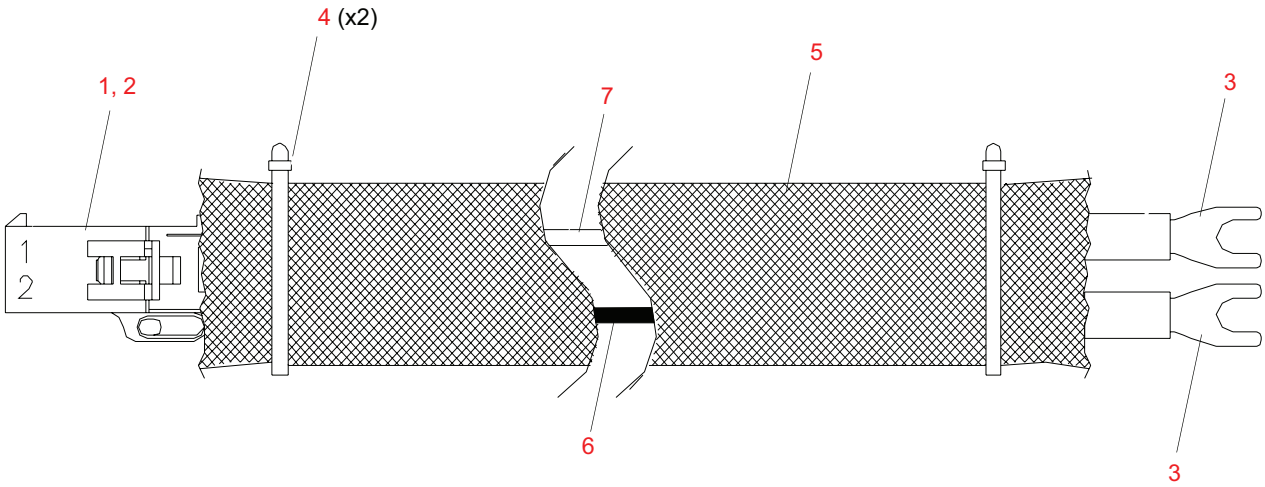
Figure 3-69: Ignitor to Relay Cable Assembly

LVS to Yoke AC Fan Cable Assembly

25.9678.0843 Rev A

Refer to Figure 3-70

No.	Item	Qty.	UM.	Description
1	52.6664.0001	2	EA	CONTACT, 22-26AWG FEMALE MATE-N-LOK 2
2	52.6664.0002	1	EA	CONN, HOUSING 2 POS CAP MATE-N-LOK 2
3	52.8231.0008	2	EA	TERM, SPADE #6 RED 22-16AWG INSERT
4	55.2186.0001	2	EA	CABLE TIE, 0.10" WD 4.00" LG SMALL
5	55.6699.0002	2.08	FT	SLEEVING, 1/4"NOM.DIA. POLY EXP BRAIDED
6	73.6222.0009	2.17	FT	WIRE, 22 AWG 600V 200C TFE WHT UL1199 19STRAND
7	73.6222.0010	2.17	FT	WIRE, 22 AWG 600V 200C TFE BLK UL1199



WIRE CHART				
FROM	CONN ITEM NO.	TO	CONN ITEM NO.	WIRE COLOR
PIN 1	2	SPADE	3	BLK
PIN 2	2	SPADE	3	WHT

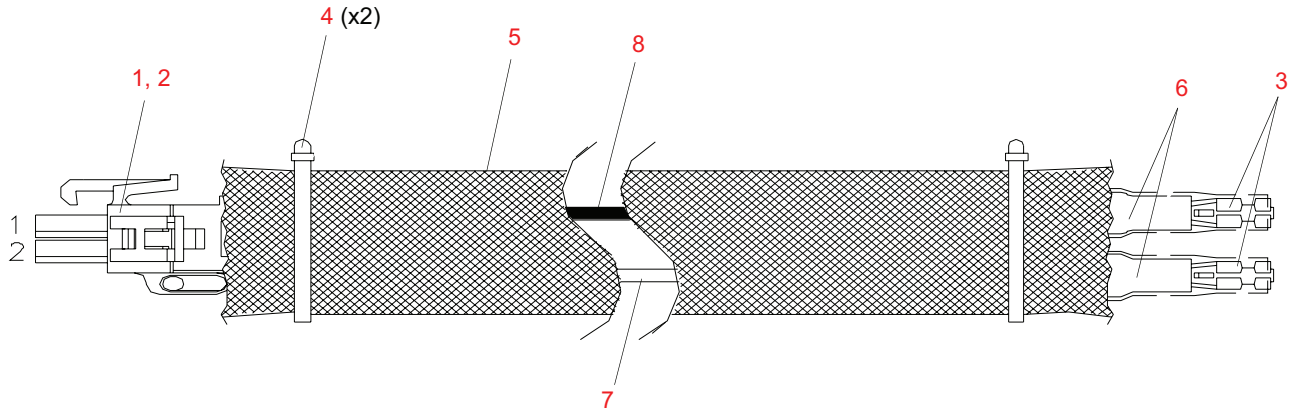
Figure 3-70: LVS to Yoke AC Fan Cable Assembly

Yoke to AC Fan Cable Assembly

25.9678.0012 Rev A

Refer to Figure 3-71

No.	Item	Qty.	UM.	Description
1	52.6665.0001	2	EA	CONTACT, 22-26AWG MALE MATE-N-LOK 2
2	52.6665.0002	1	EA	CONN, HOUSING 2 POS PLUG MATE-N-LOK 2
3	52.8413.0001	2	EA	RECEPT, FASTON .110 SERIES 22-18AWG INSULATED
4	55.2186.0002	2	EA	CABLE TIE, .09"WD 3.750"LG TEFZEL
5	55.2260.0208	2.58	FT	SLEEVING, FIBERGLASS 0.208 ID
6	55.2200.0003	0.25	FT	HEATSHRINK, 3/16" VITON
7	73.6222.0009	3.00	FT	WIRE, 22AWG 600V 200C TFE WHT UL1199 19STRAND
8	73.6222.0010	3.00	FT	WIRE, 22AWG 600V 200C TFE BLK UL1199



WIRE CHART				
FROM	CONN ITEM NO.	TO	CONN ITEM NO.	WIRE COLOR
PIN 1	2	SPADE	3	BLK
PIN 2	2	SPADE	3	WHT

Figure 3-71: Yoke To Fan AC Fan Cable Assembly

Backcap Interlock to Gobo Fan Interlock Cable Assembly

25.9678.0014 Rev B

Refer to Figure 3-72

No.	Item	Qty.	UM.	Description
1	52.8414.0001	2	EA	RECEPT, FASTON .187 SERIES 24-20 AWG UNINSUL
2	73.7089.0000	2.00	FT	WIRE. 22AWG 300V 200C TEF BLK UL1180

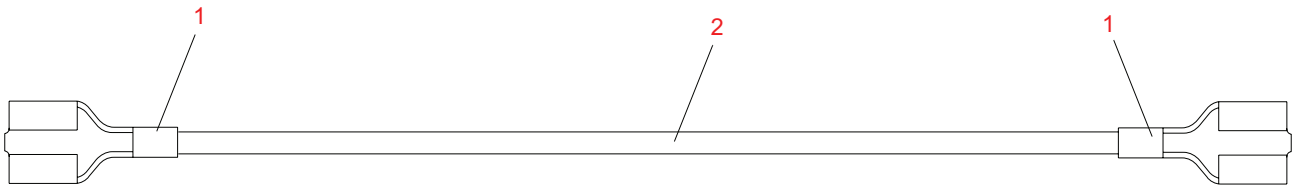


Figure 3-72: Backcap Interlok to Gobo Fan Interlok Cable Assembly

Relay to Gobo Fan Interlock Cable Assembly

25.9678.0675 Rev B

Refer to Figure 3-73.

No.	Item	Qty.	UM.	Description
1	52.8230.0003	1	EA	RECEPT, 1/4" FASTON 22-18AWG (TAPE MOUNT)
2	52.8414.0001	1	EA	RECEPT, FASTON 0.187 SERIES 24-20 AWG UNINSUL
3	73.7089.0000	2.00	FT	WIRE. 22AWG 300V 200C TEF BLK UL1180

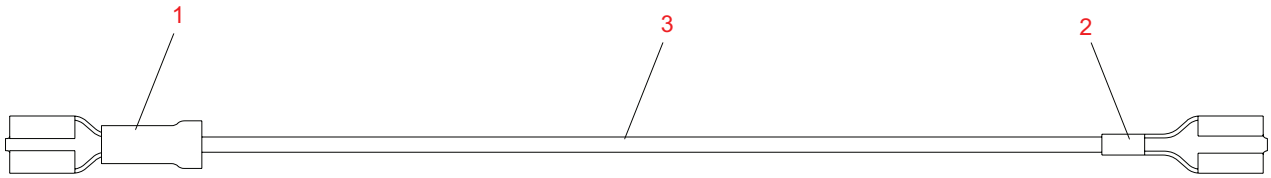


Figure 3-73: Relay to Gobo Fan Interlock Cable Assembly

Front Head Fans Cable Assembly

25.9678.0677 Rev B

Refer to Figure 3-74

No.	Item	Qty.	UM.	Description
1	52.6396.3104	1	EA	RECEPT, 4POS MTA100 W/POL TAB BLU CLSD END (changed 05-03-06)
2	52.6524.0002	2	EA	CONN, HOUSING 2POS RECEPTACLE
3	52.8346.0001	4	EA	CONTACT, 24-30AWG FEMALE CRIMP
4	73.5126.0002	2.67	FT	WIRE, 26AWG 2COND 300V 80C <BLK-RED>

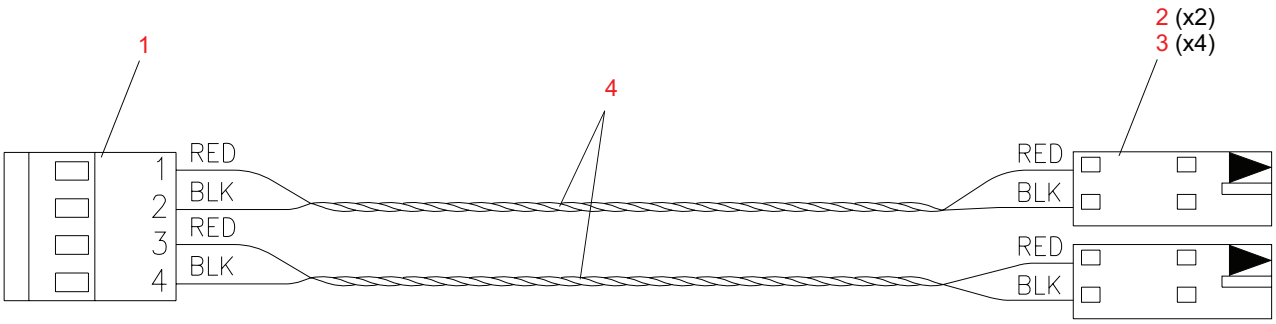


Figure 3-74: Front Head Fans Cable Assembly

Yoke Fan and Relay (Standard) Cable Assembly

25.9678.0681 Rev C (VL3500 Only)

Refer to Figure 3-75

No.	Item	Qty.	UM.	Description
1	52.6396.3103	1	EA	RECEPT, 3 POS MTA100 W/ POL TAB BLU CLSD END (changed 05-01-06)
2	52.6423.0003	1	EA	HOUSING, 3 POS MT RECEPT, 2MM
3	52.8230.0003	1	EA	RECEPT, 1/4" FASTON 22-18AWG
4	73.3526.0002	1.25	FT	WIRE, 26AWG 300V 105C PVC RED
5	73.5126.0002	1.50	FT	WIRE, 26AWG 2 COND 300V 80C <RED-BLK>

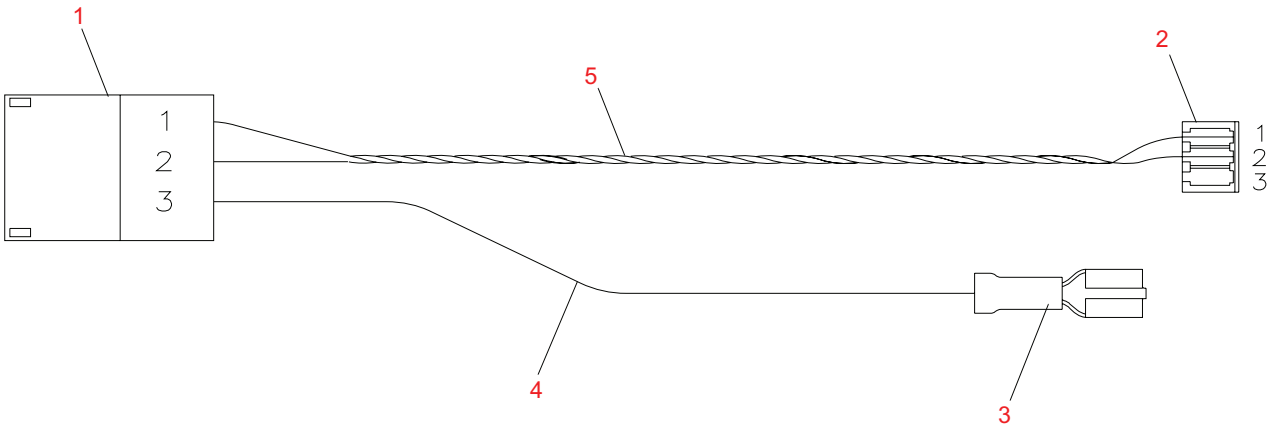


Figure 3-75: Yoke Fan and Relay (Standard) Cable Assembly - VL3500 Only

Air Duct OT Switch Cable Assembly

25.9678.0690 Rev 0 (VL3500Q)
25.9678.0691 Rev 0

Refer to Figure 3-76

No.	Item	Qty.	UM.	Description
1	52.8237.0002	1	EA	TERM, RING #4 24-20AWG
2	52.8414.0001	1	EA	RECEPT, FASTON .187 SERIES, 24-20AWG UNISUL
3	55.2198.0002	.083	FT	HEATSHRINK, 1/8" BLACK
4	55.2260.0133	.375	FT	SLEEVING, FIBERGLASS, .133" ID
5	63.2047.5130	1	EA	THERMOSTAT, 130º TO-220 OPEN ON RISE (**VL3000 Only**)
	63.2047.5120	1	EA	THERMOSTAT, 120º TO-220 OPEN ON RISE (**VL3000Q Only**)
6	73.7089.0000	1.48	FT	WIRE, 22AWG BLK 300V 200C TEFLON STRANDED

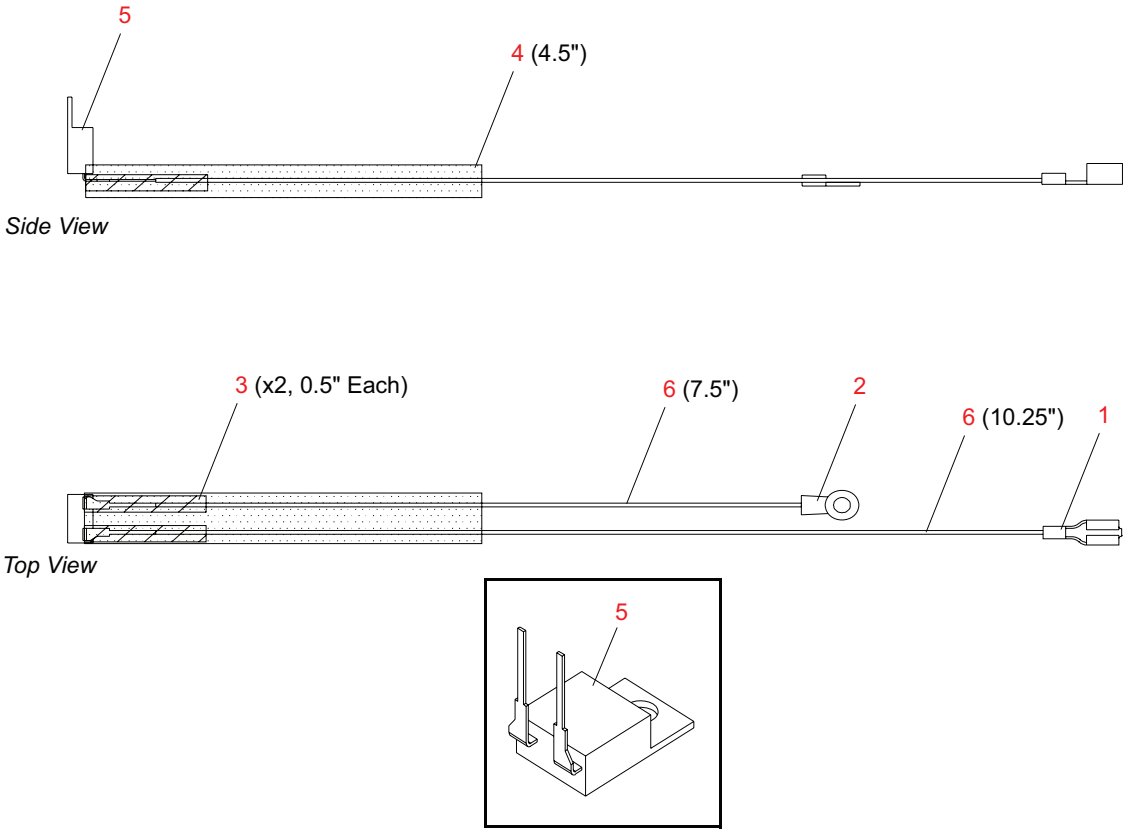


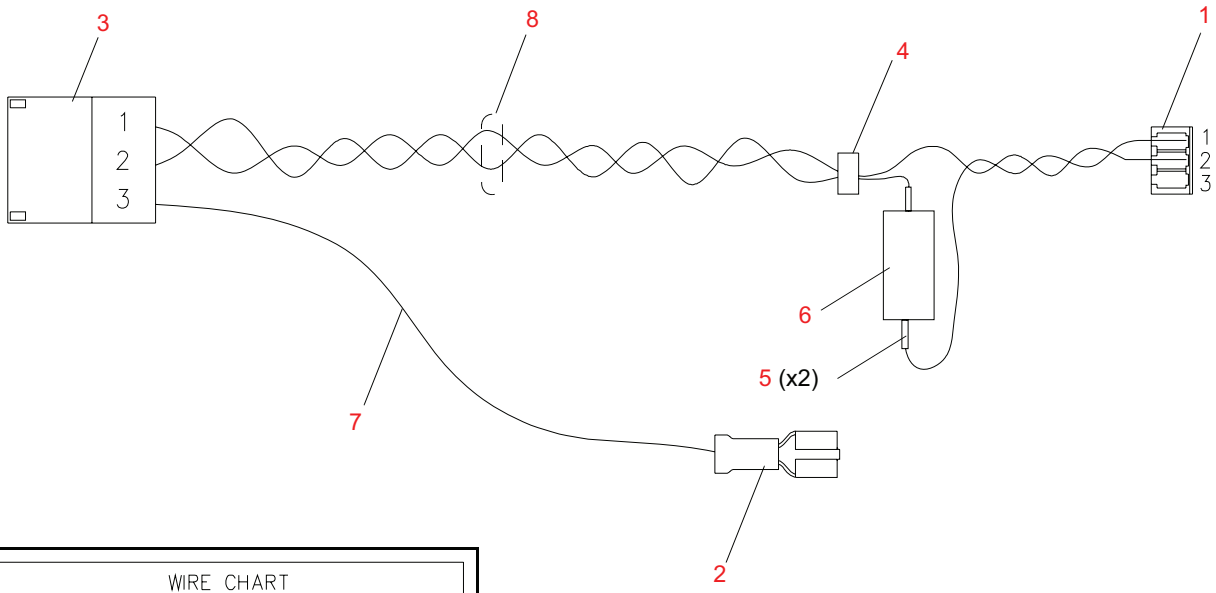
Figure 3-76: Air Duct OT Switch Cable Assembly

Yoke Fan and Relay (Quiet) Cable Assembly

25.9678.0781 Rev A (VL3500Q Only)

Refer to Figure 3-75

No.	Item	Qty.	UM.	Description
1	52.6423.0003	1	EA	HOUSING, 3 POS MT RECEPT, 2MM
2	52.8230.0003	1	EA	RECEPT, 1/4" FASTON 22-18AWG
3	52.6396.3103	1	EA	RECEPT, 3 POS MTA100 W/ POL TAB BLU CLSD END
4	55.2186.0001	1	EA	CABLE TIE, .10 X 4" SMALL
5	55.2268.0125	1	IN	HEATSHRINK, 1/8" CLEAR KYNAR UL 600V 150° C
6	60.7440.2002	1	EA	RESISITOR, 5W, 5% 200 OHM WIREWOUND
7	73.3526.0002	1.25	FT	WIRE, 26AWG 300V 105C PVC RED
8	73.5126.0002	1.50	FT	WIRE, 26AWG 2 COND 300V 80C <RED-BLK>



WIRE CHART				
FROM	CONN ITEM NO.	TO	CONN ITEM NO.	WIRE COLOR
PIN 1	3	PIN 1	1	RED
PIN 2	3	PIN 2	1	BLK
PIN 3	3	FASTON	2	RED

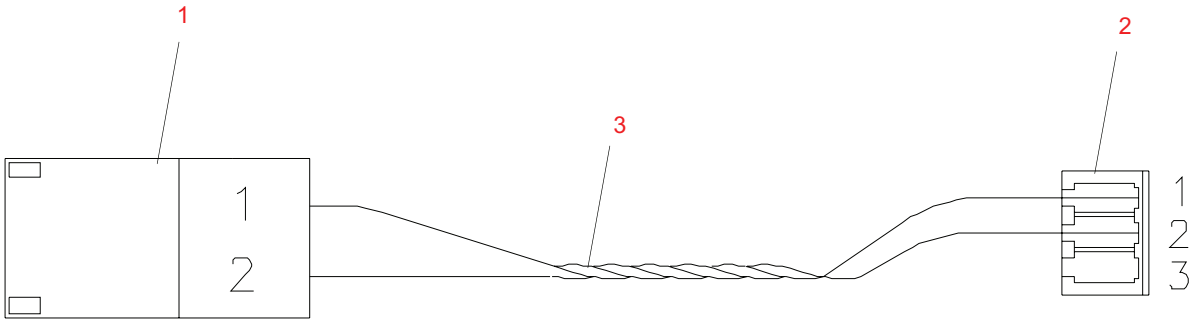
Figure 3-77: Yoke Fan and Relay (Quiet) Cable Assembly - VL3500Q Only

Yoke Fan (Standard) Cable Assembly

25.9678.0758 Rev A (VL3500 Only)

Refer to Figure 3-78

No.	Item	Qty.	UM.	Description
1	52.6396.3102	1	EA	RECEPT, 2POS MTA100 W/POL TAB BLUE CLSD END
2	52.6423.0003	1	EA	HOUSING, 3POS MT RECEPT, 2MM CT 28-26 AWG
3	73.5126.0002	0.50	FT	WIRE, 26AWG 2COND 300V 80C <BLK-RED> UL1061, 19STRND



WIRE CHART				
FROM	CONN ITEM NO.	TO	CONN ITEM NO.	WIRE COLOR
PIN 1	2	PIN 1	1	RED
PIN 2	2	PIN 2	1	BLK

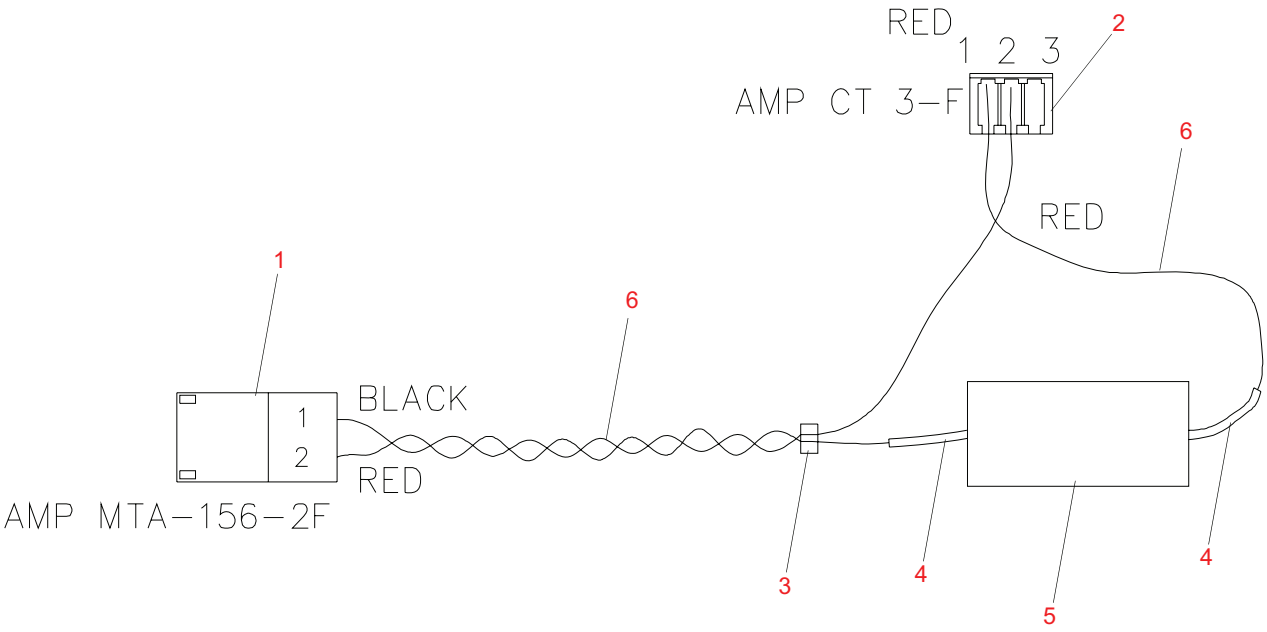
Figure 3-78: Yoke Fan (Standard) Cable Assembly - VL3500 Only

Yoke Fan (Quiet) Cable Assembly

25.9678.0759 Rev A (VL3500Q Only)

Refer to Figure 3-78

No.	Item	Qty.	UM.	Description
1	52.6396.3102	1	EA	RECEPT, 2 POS MTA100 W/POL TAB BLUE CLSD END
2	52.6423.0003	1	EA	HOUSING, 3 POS MT RECEPT, 2MM CT 28-26 AWG
3	55.2186.0001	1	EA	CABLE TIE, .10 X 4" SMALL
4	55.2268.0125	1	EA	HEASTRINK, 1/8" CLEAR KYNAR UL 600V 150^{O} C
5	60.7440.2002	1	EA	RESISTOR, 5W, 5% 200 OHM WIREWOUND
6	73.5126.0002	0.50	FT	WIRE, 26AWG 2COND 300V 80C <BLK-RED> UL1061, 19STRND



WIRE CHART				
FROM	CONN ITEM NO.	TO	CONN ITEM NO.	WIRE COLOR
PIN 1	2	PIN 1	1	RED
PIN 2	2	PIN 2	1	BLK

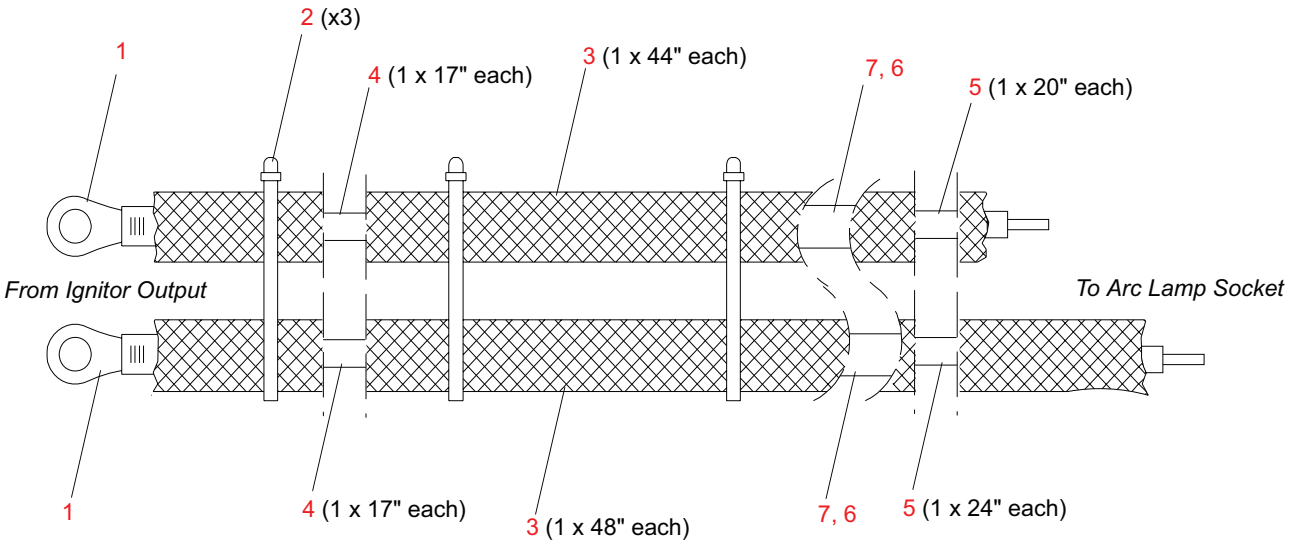
Figure 3-79: Yoke Fan (Quiet) Cable Assembly - VL3500Q Only

Ignitor to Lamp Socket Cable Assembly

25.9678.0789 Rev B

Refer to Figure 3-80.

No.	Item	Qty.	UM.	Description
1	52.8231.0005	2	EA	TERM, RING #6 BLUE 16-14 AWG REEL PIDG
2	55.2186.0001	3	EA	CABLE TIE, .10"WD 4.00"LG SMALL
3	55.2260.0133	6.83	FT	SLEEVING, FIBERGLASS .133" ID
4	73.7100.0001	2.84	FT	WIRE, 16AWG 20KVDC 41/32 STRD 200C SILICONE 2 X 17"
5	73.7190.0001	3.66	FT	WIRE, 250 DEG C
6	55.2200.0003	.33	FT	HEAT SHRINK TUBING 2 X 2"
7	52.8274.1614	2	EA	CONN, BUTT SPLICE, 16-14 PIDG



Note: Some material removed to show wire detail.

Figure 3-80: Ignitor to Lamp Socket Cable Assembly

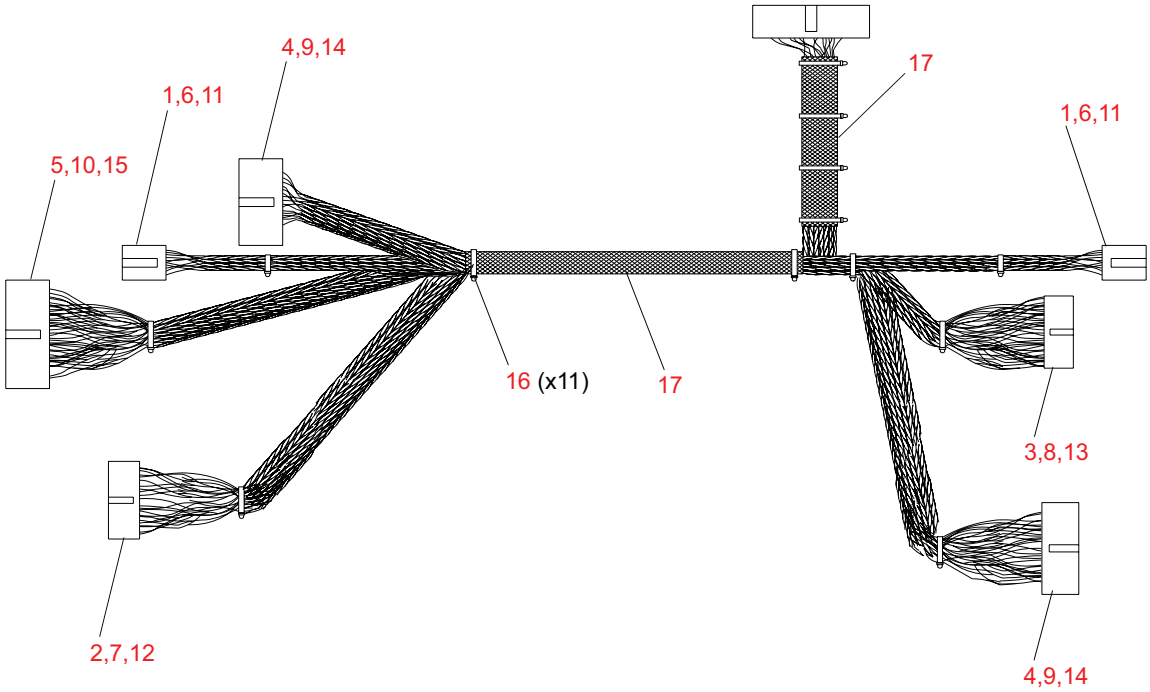
Head Controller Cable Assembly

25.9678.1715 Rev A

Refer to Figure 3-81

No.	Item	Qty.	UM.	Description
1	52.6610.0014	1	EA	CONN HOUSING, 14 POS DBL ROW UNLOADED
2	52.6610.0024	1	EA	CONN HOUSING, 24 POS DBL ROW UNLOADED
3	52.6610.0034	1	EA	CONN HOUSING, 34 POS DBL ROW UNLOADED
4	52.6610.0040	3	EA	CONN HOUSING, 40 POS DBL ROW UNLOADED
5	52.6610.0017	1	EA	CONN HOUSING, 50 POS DBL ROW UNLOADED
6	52.6224.1014	2	EA	COVER, FRONT 14 POS MT LATCHING
7	52.6224.1024	1	EA	COVER, FRONT 24 POS MT LATCHING
8	52.6224.1034	1	EA	COVER, FRONT 34 POS MT LATCHING
9	52.6224.1040	3	EA	COVER, FRONT 40 POS MT LATCHING
10	52.6224.1050	1	EA	COVER, FRONT 50 POS MT LATCHING
11	52.6224.2014	2	EA	COVER, BACK 14 POS MT
12	52.6224.2024	1	EA	COVER, BACK 24 POS MT
13	52.6224.2034	1	EA	COVER, BACK 34 POS MT
14	52.6224.2040	3	EA	COVER, BACK 40 POS MT
15	52.6224.2050	1	EA	COVER, BACK 50 POS MT
16	55.2186.0001	11	EA	CABLE TIE, .10"WD 4.00"LG SMALL
17	55.6699.0004	1.92	FT	SLEEVING, 3/4" NOM. DIA. POLY EXP BRAIDED
18	73.3026.0009	1.83	FT	WIRE, 26 AWG 300V 80 DEG C PVC WHITE
19	73.3026.0329	1.83	FT	WIRE, 26 AWG 3 COND TW 300V PVC <RED-WHT/VIO-BLK>
20	73.5116.0123	41.42	FT	WIRE, 24 AWG 4 COND TW 300V 80C <BLK-BRN-RED-ORG> UL1061
21	73.5126.0002	3.75	FT	WIRE, 26 AWG 2 COND TWISTED <RED-BLK>
22	73.5126.0007	1.83	FT	WIRE, 26 AWG 2 COND 300V 80C UL1061 19STRND <BLK-V1O>
23	73.5126.0029	1.83	FT	WIRE, 24 AWG 3 COND TW 300V PVC <RED-WHT-BLK>
24	73.5126.0129	1.83	FT	WIRE, 26 AWG 3 COND TW 300V PVC <RED-WHT/RED-BLK>
25	73.5126.0229	1.83	FT	WIRE, 26 AWG 3 COND TW 300V PVC <RED-WHT/BLK-BLK>
26	73.5126.6009	1.92	FT	WIRE, 26 AWG 6 COND TWISTED <WHT-WHT/BLU-WHT/BLK-WHT/ BRN-WHT/GRN-WHT/RED>
27	52.8351.0004	226	EA	CONTACT, 26-22AWG RECP MTE REEL (NOT SHOWN)

Head Controller Cable Assembly (continued)



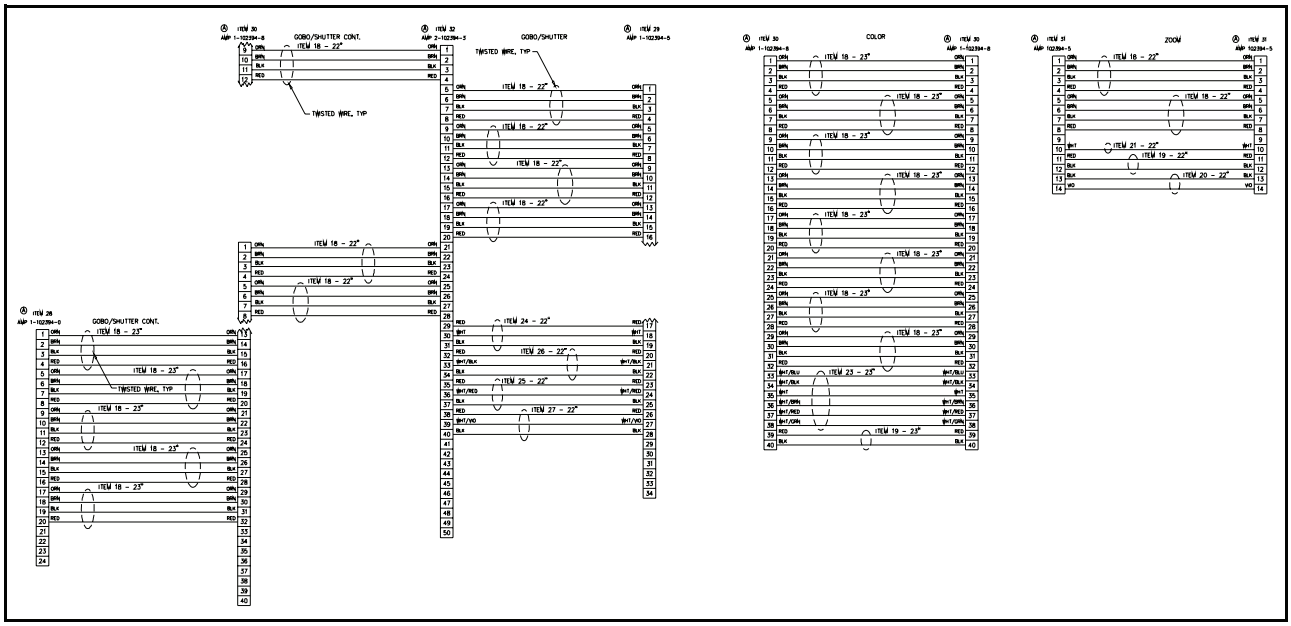


Figure 3-81: Head Controller Cable Assembly

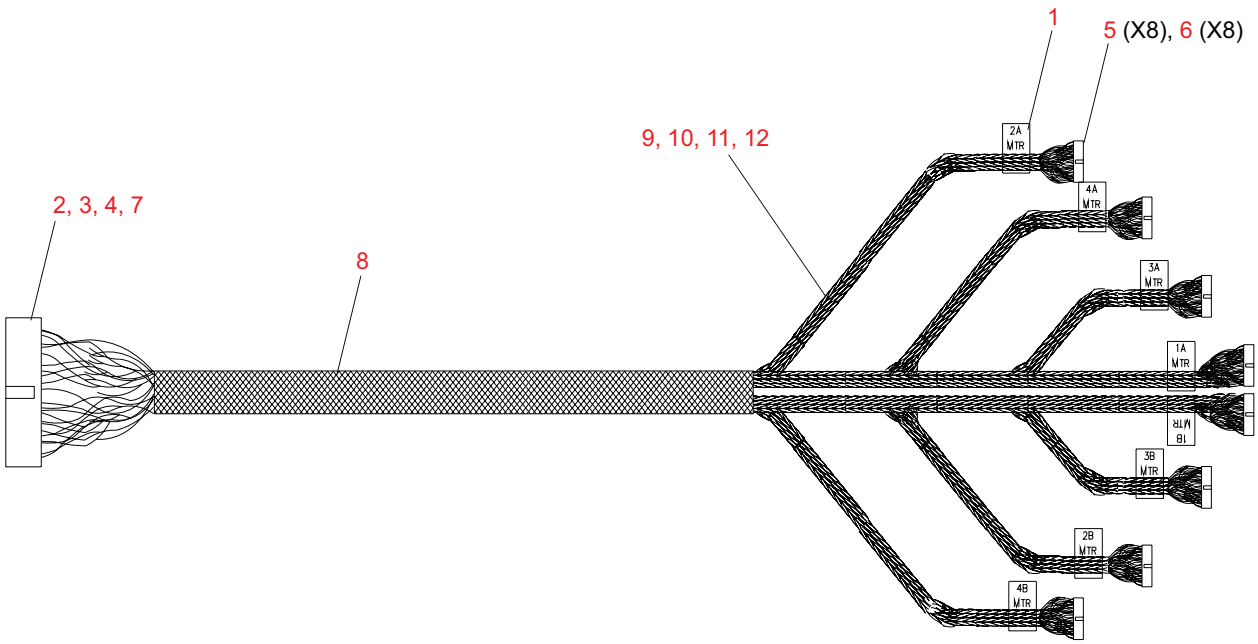
Shutter Disk Cable Assembly

25.9678.1717 Rev A

Refer to Figure 3-81

No.	Item	Qty.	UM.	Description
1	04.9678.1717.00	1	EA	LABEL SET, SHUTTER DISK HARNESS
2	52.6610.0040	1	EA	CONN, HOUSING, 40-POS DBL ROW UNLOADED
3	52.6224.1040	1	EA	COVER, FRONT 40-POS MT LATCH
4	52.6224.2040	1	EA	COVER, BACK 40-POS MT
5	52.6696.0001	8	EA	RECEPTACLE, WIRE TO WIRE, 4-POS 2 MM PITCH 28-24 AWG
6	52.6694.0001	32	EA	CRIMP TERMINAL, WIRE TO WIRE FEMALE 2 MM PITCH 28-24 AWG
7	52.8351.0004	32	EA	CONTACT, 26-22 AWG RECPT MTE (REEL)
8	55.6699.0009	14.00	FT	SLEEVING, 3/8" NOM SIA POLY EXP BRAIDED FLAME RET
9	73.5127.0003	15.00	FT	WIRE, 26 AWG 300V 200 DEG C TEF RED
10	73.5127.0005	15.00	FT	WIRE, 26 AWG 300V 200 DEG C TEF YELLOW
11	73.5127.0006	15.00	FT	WIRE, 26 AWG 300V 200 DEG C TEF BLUE
12	73.5127.0008	15.00	FT	WIRE, 26 AWG 300V 200 DEG C TEF ORANGE

Shutter Disk Cable Assembly (continued)



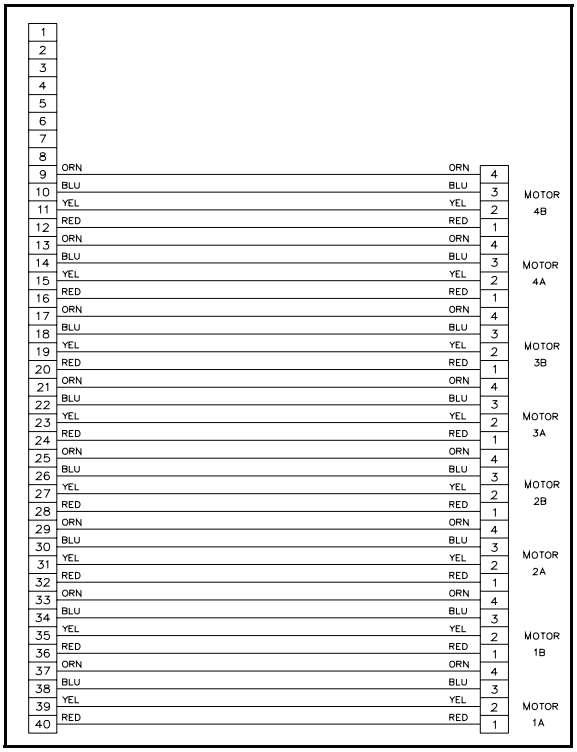

1 ORN ORN 4
2 BLU BLU 3
3 YEL YEL 2 MOTOR 4B
4 RED RED 1
5 ORN ORN 4
6 BLU BLU 3
7 YEL YEL 2 MOTOR 4A
8 RED RED 1
9 ORN ORN 4
10 BLU BLU 3
11 YEL YEL 2 MOTOR 3B
12 RED RED 1
13 ORN ORN 4
14 BLU BLU 3
15 YEL YEL 2 MOTOR 3A
16 RED RED 1
17 ORN ORN 4
18 BLU BLU 3
19 YEL YEL 2 MOTOR 2B
20 RED RED 1
21 ORN ORN 4
22 BLU BLU 3
23 YEL YEL 2 MOTOR 2A
24 RED RED 1
25 ORN ORN 4
26 BLU BLU 3
27 YEL YEL 2 MOTOR 1B
28 RED RED 1
29 ORN ORN 4
30 BLU BLU 3
31 YEL YEL 2 MOTOR 1A
32 RED RED 1
33 ORN ORN 4
34 BLU BLU 3
35 YEL YEL 2 MOTOR 1B
36 RED RED 1
37 ORN ORN 4
38 BLU BLU 3
39 YEL YEL 2 MOTOR 1A
40 RED RED 1

Figure 3-82: Shutter Disk Cable Assembly

EMI Filter to Power Switch Cable Assembly

25.9678.0811 Rev C

Refer to Figure 3-83

No.	Item	Qty.	UM.	Description
1	52.8313.0001	2	EA	RCPT, FASTON 1/4" 18-14 AWG FLAG DBL CRP (REEL)
2	52.8392.0001	2	EA	RECP, FASTON .187"X0.32" 16-14 AWG FLAG DBL CRP
3	55.2186.0001	1	EA	CABLE TIE, 0.10" WD 4.00" LG SMALL
4	73.6016.0009	0.83	FT	WIRE, 16AWG 600V 105C PVC WHT UL1015
5	73.6016.0010	0.83	FT	WIRE, 16AWG 600V 105C PVC BLK UL1015

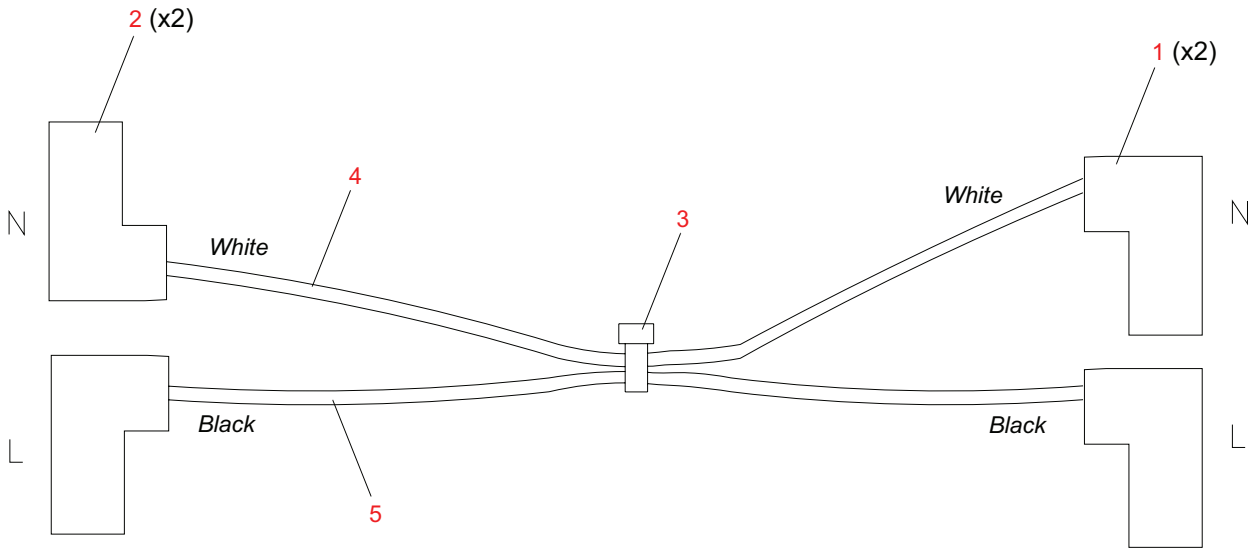


Figure 3-83: EMI Filter to Power Switch Cable Assembly

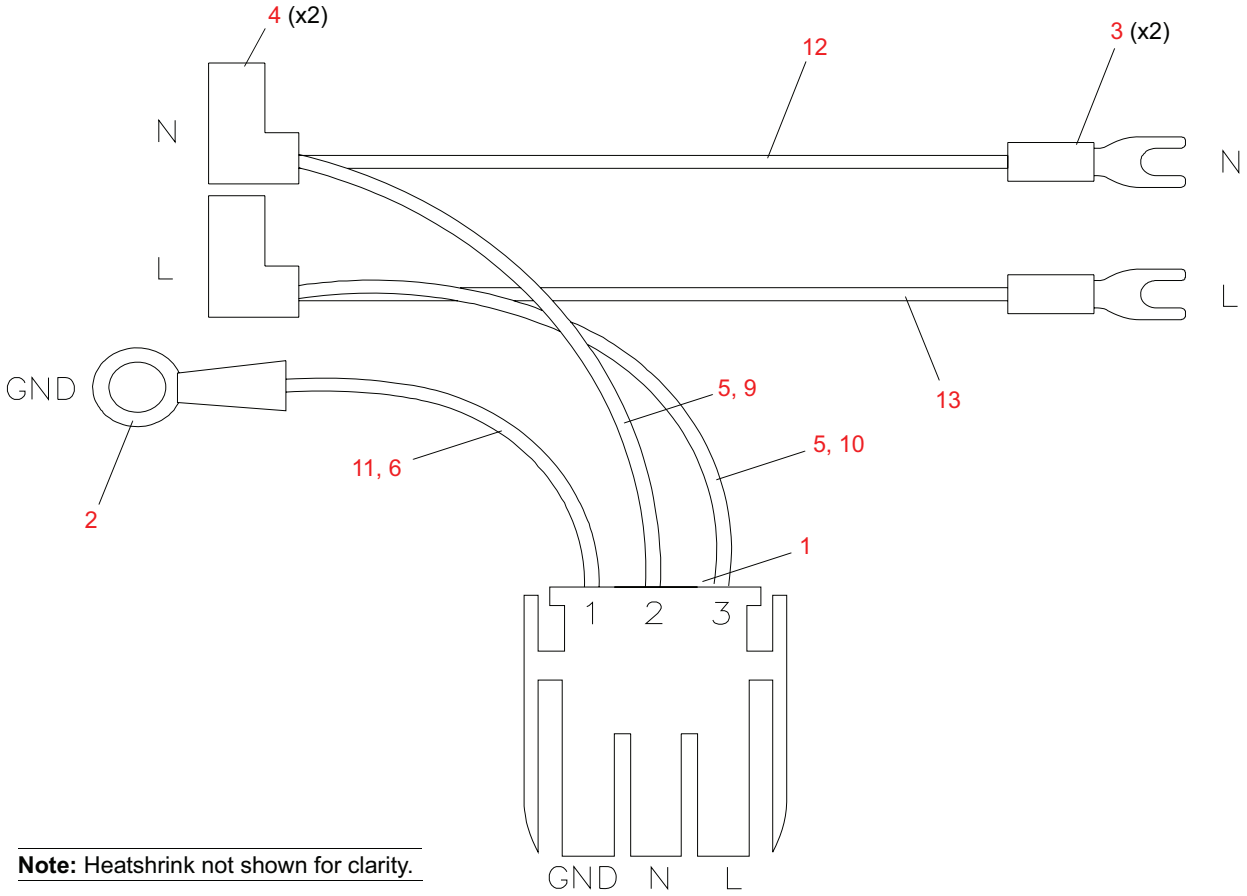
AC Input Splitter Cable Assembly

25.9678.0812 Rev E

Refer to Figure 3-84

No.	Item	Qty.	UM.	Description
1	52.6231.0001	1	EA	PLUG HOUSING, MNLOK PLUG 3 POS
2	52.8231.0005	1	EA	TERM, RING #6 BLUE 16-14 AWG REEL PIDG
3	52.8231.0008	2	EA	TERM, SPADE #6 RED 22-16 AWG INSERT
4	52.8392.0001	2	EA	RECP, FASTON .187" X 0.32" 16-14 AWG FLAG DBL CRP
5	52.8270.0001	2	EA	CONTACT PIN, 20-14 AWG MNLOK (REEL)
6	52.8314.0001	1	EA	PIN, GND 20-14 AWG MNLOK .060"- .130"INS DIA
7	55.2186.0001	3	EA	CABLE TIE, .10" WD, 4.00" LG, SMALL
8	55.6699.0003	1.50	FT	SLEEVING, 1/2" NOM. DIA. POLY EXP BRAIDED
9	73.6016.0009	1.83	FT	WIRE, 16 AWG 600V 105C PVC WHT UL1015
10	73.6016.0010	1.83	FT	WIRE, 16 AWG 600V 105C PVC BLK UL1015
11	73.6016.0504	2.08	FT	WIRE, 16 AWG 600V 105C PVC GRN/YEL UL1015
12	73.6018.0009	1.00	FT	WIRE, 18 AWG 600V 105C PVC WHT UL1015
13	73.6018.0010	1.00	FT	WIRE, 18 AWG 600V 105C PVC BLK UL1015

AC Input Splitter Cable Assembly (continued)



Note: Heatshrink not shown for clarity.

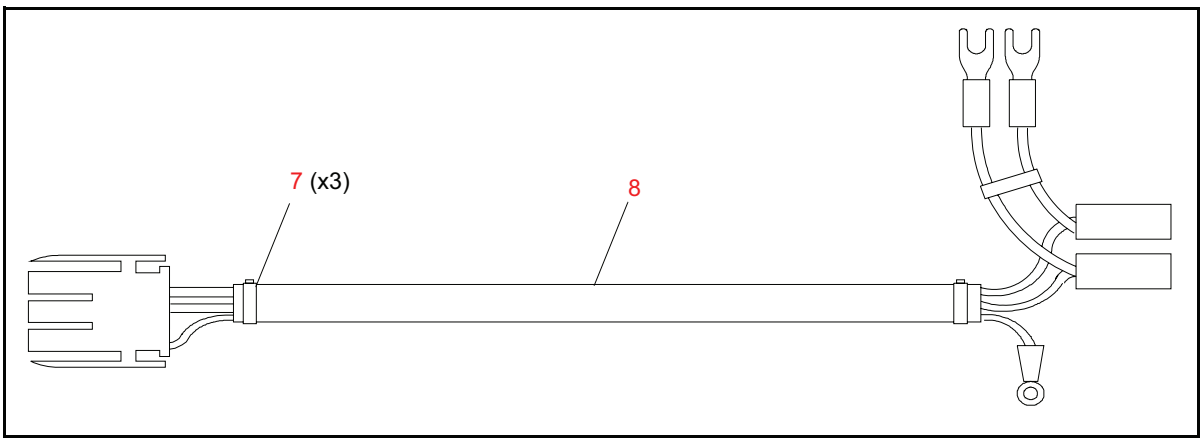


Figure 3-84: AC Input Splitter Cable Assembly

Data I/O Link Cable Assembly

25.9678.0813 Rev A

Refer to Figure 3-85

No.	Item	Qty.	UM.	Description
1	52.6396.2904	1	EA	RECEPT, 4 POS MTA100 W/POL TAB RED CLSD END (changed 05-03-06)
2	52.6396.2905	1	EA	RECEPT, 5 POS MTA100 W/POL TAB RED CLSD END (changed 05-03-06)
3	73.5122.0259	2.17	FT	CBL, 22AWG STRND 4COND PVC INSUL

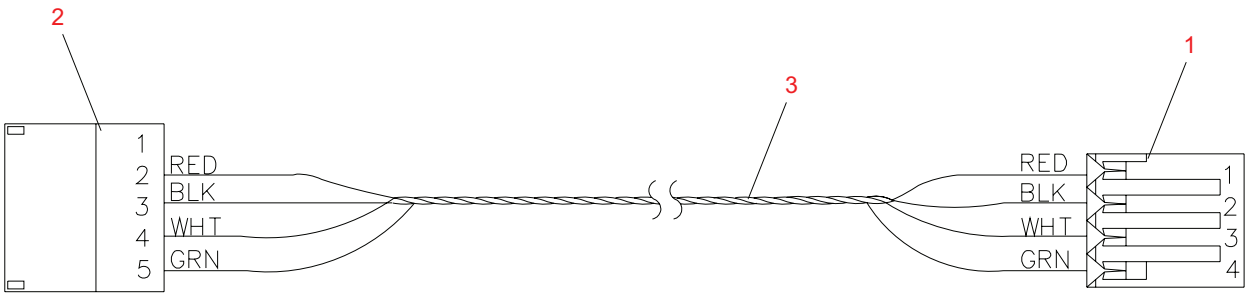


Figure 3-85: Data I/O Link Cable Assembly

Display Cable Assembly

25.9678.1825 Rev C

Refer to Figure 3-86

No.	Item	Qty.	UM.	Description
1	52.6396.2406	2	EA	RECEPT, 6 POS MTA100 W/POL TAB WHT CLSD END
2	73.5116.0123	1.02	FT	WIRE, 24AWG 4COND TW <BLK-BRN-RED-ORN>
3	55.2186.0001	4	EA	CABLE TIE, .10" WD 4" LG SMALL
4	73.7130.0004	0.958	FT	WIRE, TUBULAR BRAID, 1/8" X 23" LG
5	73.6224.0005	0.208	FT	WIRE, 24AWG 600V 200C TFE GRN 2.5" LG
6	55.6699.0009	2.08	FT	SLEEVING, 3/8" NOM DIA POLY EXP
7	55.6621.0001	1	EA	SLEEVE, NYLON THIN WALL #6 SCR 1.0" LG

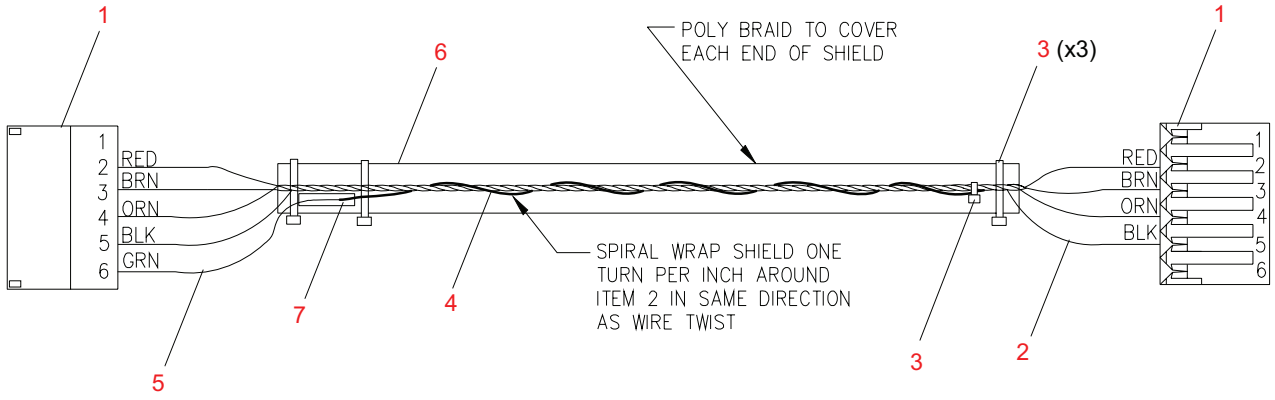


Figure 3-86: Display Cable Assembly

Ballast to Controller Cable Assembly

25.9678.0816 Rev A

Refer to Figure 3-87

No.	Item	Qty.	UM.	Description
1	52.6396.3002	1	EA	RECEPT, 2 POS MTA100 W/POL TAB WHT CLSD END (changed 05-03-06)
2	52.6396.3005	1	EA	RECEPT, 5 POS MTA100 W/POL TAB WHT CLSD END (changed 05-03-06)
3	52.6396.3008	1	EA	RECEPT, 8 POS MTA100 W/POL TAB WHT CLSD END (changed 05-03-06)
4	73.5124.1289	3.67	FT	WIRE, 24AWG 5COND <BLK-BRN-RED-GRN-WHT>

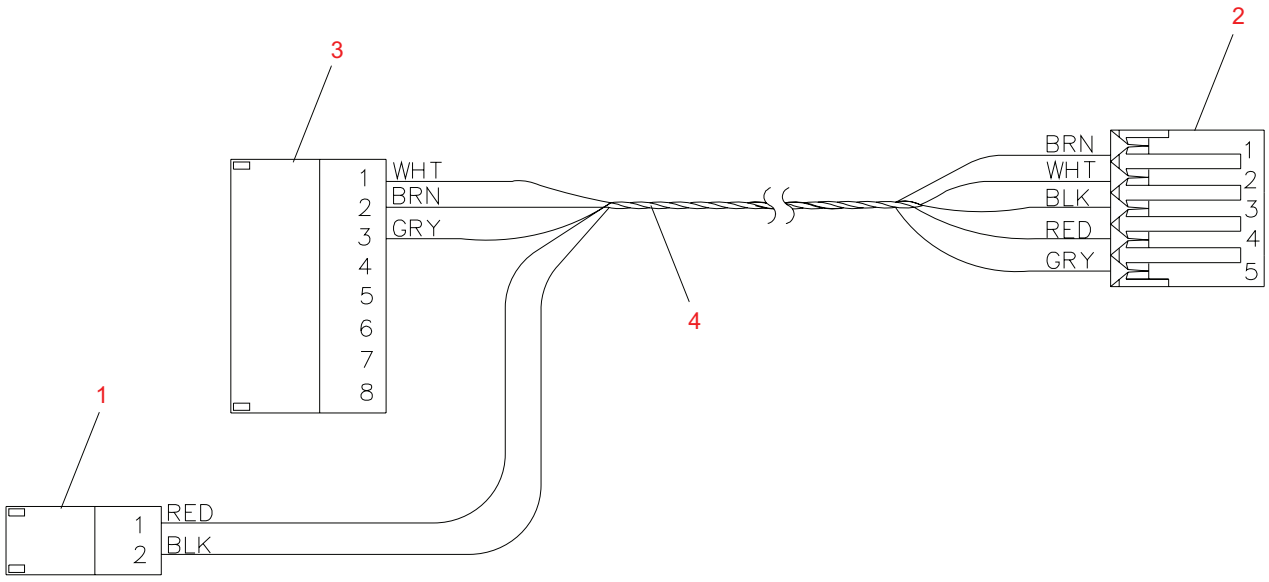


Figure 3-87: Ballast to Controller Cable Assembly

DC Output Cable Assembly

25.9678.0821 Rev E

Refer to Figure 3-88

No.	Item	Qty.	UM.	Description
1	52.6464.0002	1	EA	CONN, HOUSING, SL-156 2 POS
2	52.6464.0003	1	EA	CONN, HOUSING, SL-156 3 POS
3	52.8231.0004	2	EA	TERM, RING #6 BLUE 12-10 AWG INSRT
4	52.8323.0002	4	EA	CONTACT, CRIMP, 18-22 AWG SL-156 (**not shown**)
5	52.8274.1614	2	EA	CONN BUTT SPLICE 16-14 BLUE .150" OD MAX
6	55.2186.0001	4	EA	CABLE TIE, .01" x 4.00" SMALL
7	55.6699.0003	2.08	FT	SLEEVING, 1/2" NOM DIA POLY EXP BRAID
8	73.3518.0002	1.58	FT	WIRE, 18 AWG 300V 105C PVC RED
9	73.3518.0010	1.58	FT	WIRE, 18 AWG 300V 105C PVC BLK
10	73.7060.0001	2.08	FT	WIRE, 18 AWG HI VOLT RED YOKE LMP
11	73.7060.0002	2.08	FT	WIRE, 18 AWG HI VOLT BLK YOKE LMP

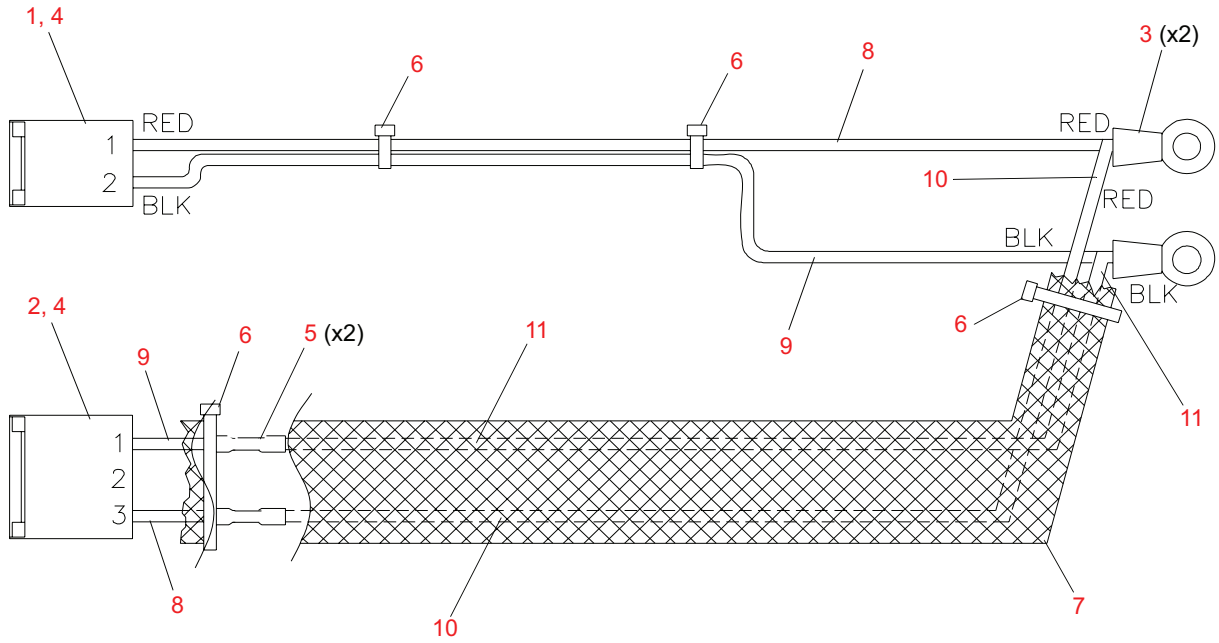


Figure 3-88: DC Output Cable Assembly

Pan/Tilt Control Cable Assembly

25.9678.0818 Rev B

Refer to Figure 3-89

No.	Item	Qty.	UM.	Description
1	52.6610.0008	1	EA	CONN, HOUSING, 20 POS DBL ROW UNLOADED (changed 05-03-06)
2	52.6224.1020	1	EA	COVER, FRONT 20 POS MT LATCHING
3	52.6224.2020	1	EA	COVER, BACK 20 POS MT
4	52.6524.0005	2	EA	CONN, HOUSING 5 POS RECEPTACLE
5	52.6588.0007	2	EA	HOUSING, 7 POS XH 250V/3A 2.5MM PITCH - USE SXH CONTACTS
6	52.7007.0001	6	EA	CONTACT, 28-22 AWG PHOSPHOR BRONZE TIN-PLT SXH
7	52.8346.0001	10	EA	CONTACT, 24-30 AWG FEMALE CRIMP
8	55.2186.0001	6	EA	CABLE TIE, 0.10" WD 4.00" LG SMALL
9	73.5119.0246	6.08	FT	WIRE, 24 AWG 3COND TW 600V 200C <RED-YEL-BLU>UL1213
10	73.5124.1289	6.17	FT	WIRE, 24 AWG 5COND 300V 80C (BLK-BRN-RED-GRY-WHT)
11	52.8351.0004	16	EA	CONTACT, 26-22 AWG RECP MTE (REEL) (added 05-03-06)

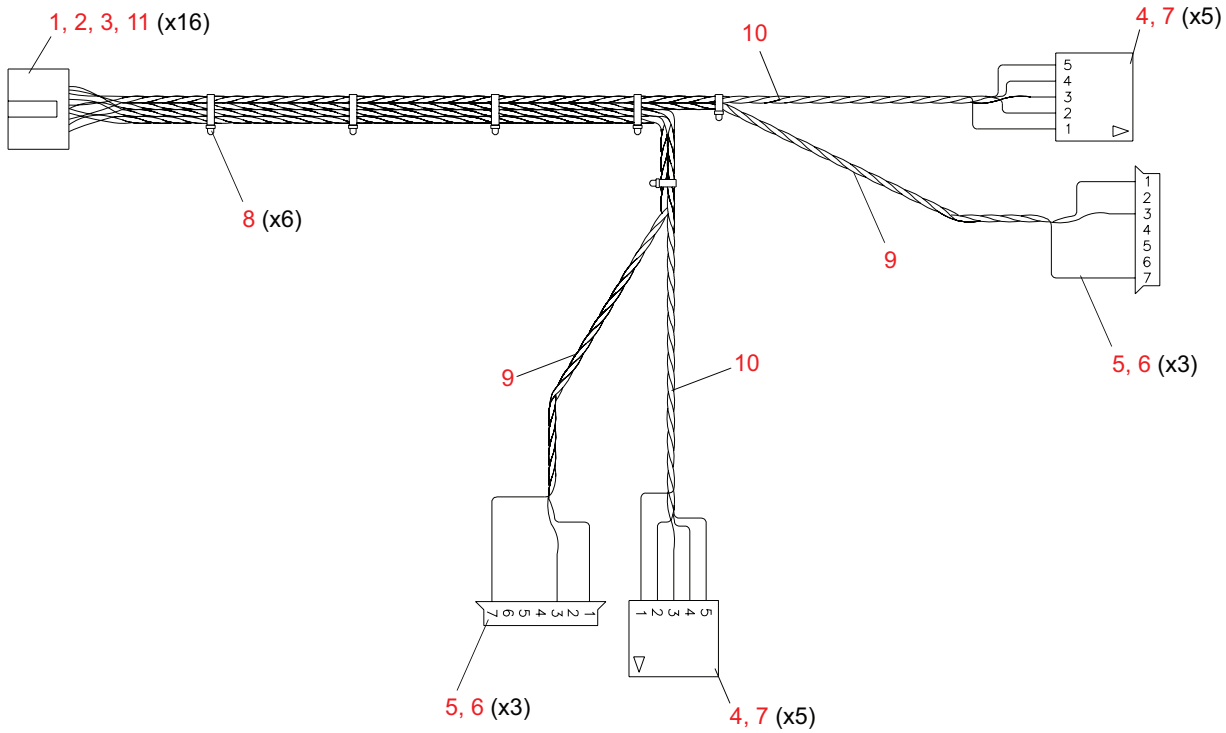


Figure 3-89: Pan/Tilt Control Cable Assembly

Lamp Supply to Relay Cable Assembly

25.9678.0829 Rev A

Refer to Figure 3-90

No.	Item	Qty.	UM.	Description
1	52.8312.0001	4	EA	RECP, FASTON 1/4" 18-14 AWG INSULATED VO
2	55.2186.0001	3	EA	CABLE TIE, .10"WD 4.00"LG SMALL
3	55.6699.0003	3.19	FT	SLEEVING, 1/2" NOM. DIA POLY EXP BRAIDED
4	73.7089.0000	34.41	FT	WIRE, 22 AWG BLK 300V TEFLON STRANDED
5	73.7089.0009	34.41	FT	WIRE, 22 AWG WHT 300V TEFLON STRANDED
6	73.3516.05604	0.58	FT	WIRE, 16 AWG 300V 105 DEG C PVC GRN/YEL UL1569
7	52.8245.0001	1	EA	TERM, RING #10 16-14 AWG REEL PIDG
8	73.7130.0005	2.08	FT	WIRE, TUBULAR BRAID, 7/16"
9	55.2183..0001	0.33	FT	HEATSRINK, 1/2" BLACK

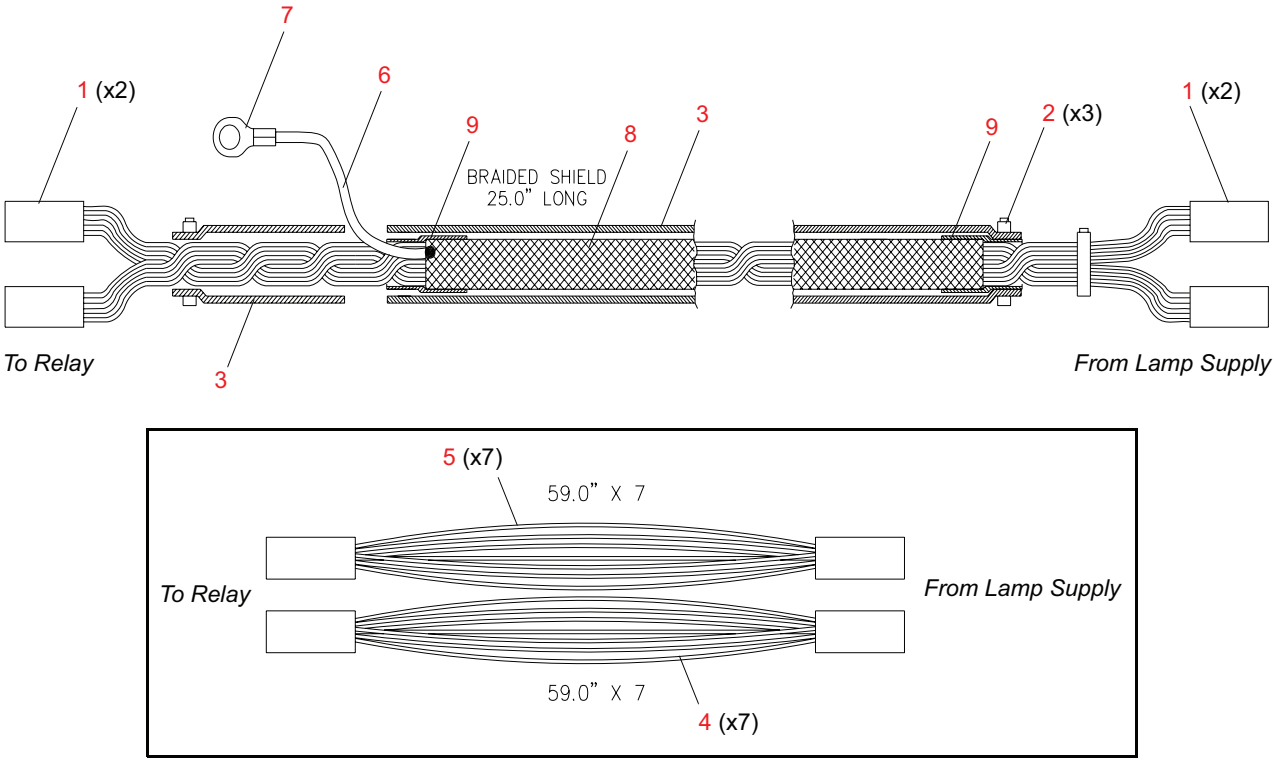


Figure 3-90: Lamp Supply to Relay Cable Assembly

Gobo/Rotate Interconnect Cable Assembly

25.9678.1209 Rev A

Refer to Figure 3-91 and Figure 3-92

No.	Item	Qty.	UM.	Description
1	25.9678.1209	1	EA	CABLE ASSY, GOBO/ROTATE INTERCONNECT

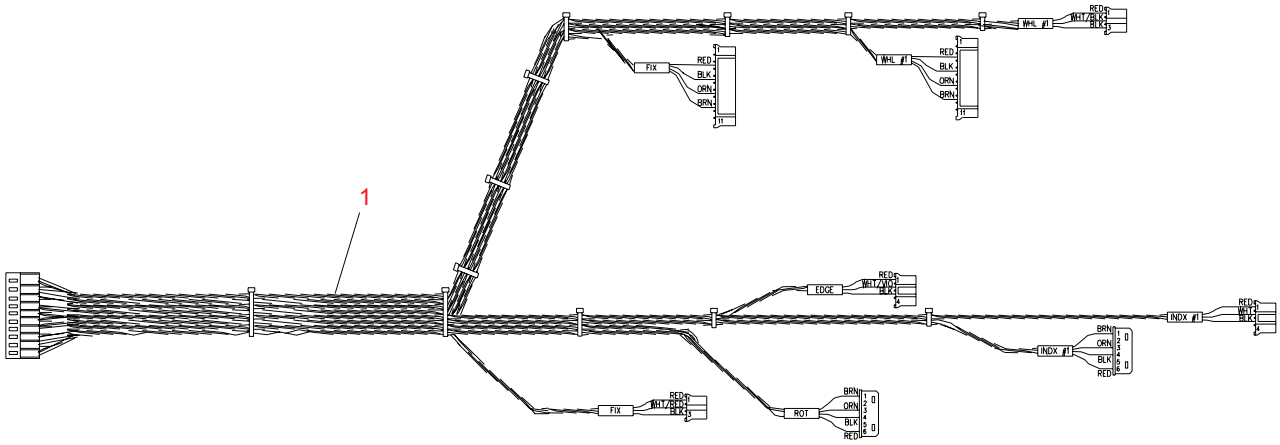
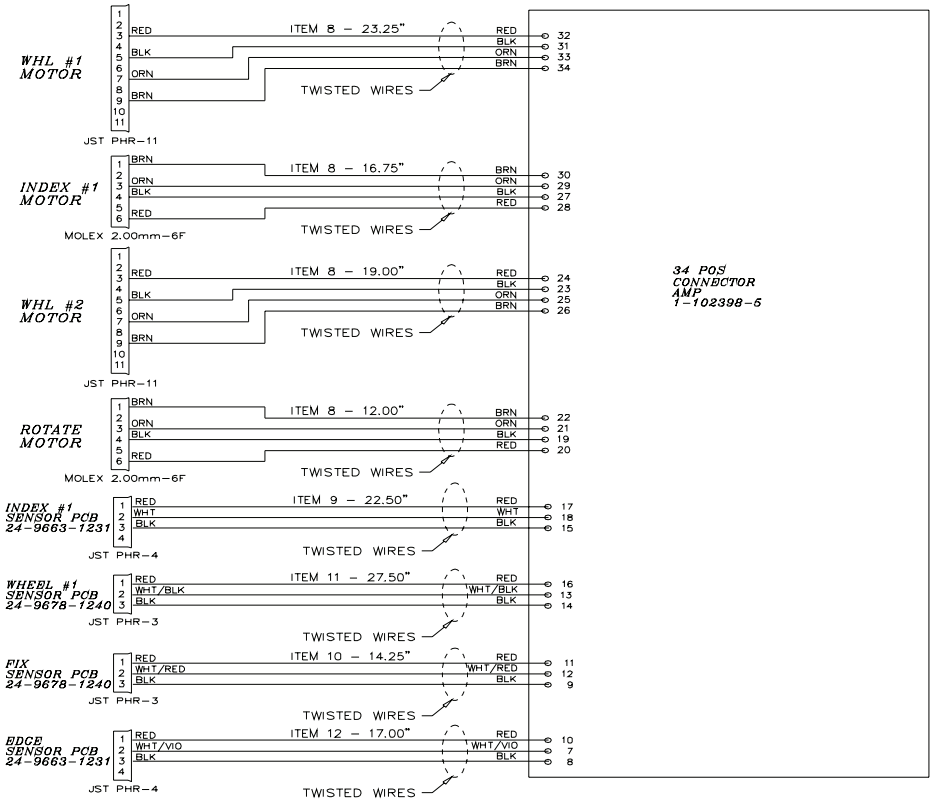


Figure 3-91: Gobo/Rotate Interconnect Cable Assembly

Gobo/Rotate Interconnect Cable Assembly (continued)



WIRE CHART					
FROM PIN	TO	CONN ITEM NO.	WIRE COLOR	WIRE ITEM NO.	FUNCTION
33	PIN 7	13	ORN	8	WHEEL #1 MOTOR - 2A
34	PIN 9	13	BRN	8	WHEEL #1 MOTOR - 2B
31	PIN 5	13	BLK	8	WHEEL #1 MOTOR - 1B
32	PIN 3	13	RED	8	WHEEL #1 MOTOR - 1A
29	PIN 3	5	ORN	8	INDEX #1 MOTOR - 2A
30	PIN 1	5	BRN	8	INDEX #1 MOTOR - 2B
27	PIN 4	5	BLK	8	INDEX #1 MOTOR - 1B
28	PIN 6	5	RED	8	INDEX #1 MOTOR - 1A
25	PIN 7	13	ORN	8	FIX MOTOR - 2A
26	PIN 9	13	BRN	8	FIX MOTOR - 2B
23	PIN 5	13	BLK	8	FIX MOTOR - 1B
24	PIN 3	13	RED	8	FIX MOTOR - 1A
21	PIN 3	5	ORN	8	ROTATE MOTOR - 2A
22	PIN 1	5	BRN	8	ROTATE MOTOR - 2B
19	PIN 4	5	BLK	8	ROTATE MOTOR - 1B
20	PIN 6	5	RED	8	ROTATE MOTOR - 1A
17	PIN 1	3	RED	9	VCC_R - INDEX #1 SENSOR
18	PIN 2	3	WHT	9	SENSE - INDEX #1 SENSOR
15	PIN 3	3	BLK	9	GND - INDEX #1 SENSOR
16	PIN 1	2	RED	11	VCC_R - WHEEL #1 SENSOR
13	PIN 2	2	WHT/BLK	11	SENSE - WHEEL #1 SENSOR
14	PIN 3	2	BLK	11	GND - WHEEL #1 SENSOR
11	PIN 1	2	RED	10	VCC_R - FIX SENSOR
12	PIN 2	2	WHT/RED	10	SENSE - FIX SENSOR
9	PIN 3	2	BLK	10	GND - FIX SENSOR
10	PIN 1	3	RED	12	VCC_R - EDGE SENSOR
7	PIN 2	3	WHT/VIO	12	SENSE - EDGE SENSOR
8	PIN 3	3	BLK	12	GND - EDGE SENSOR
5	-	-	-	-	NOT USED
6	-	-	-	-	NOT USED
3	-	-	-	-	NOT USED
4	-	-	-	-	NOT USED
1	-	-	-	-	NOT USED
2	-	-	-	-	NOT USED

Figure 3-92: Gobo/Rotate Interconnect Cable Assembly Wire Chart

LVS Chassis Ground Cable Assembly

25.9678.1716 Rev A

Refer to Figure 3-93

No.	Item	Qty.	UM.	Description
1	52.8231.0005	1	EA	TERMINAL, RING, #6 BLUE, 16-14 AWG REEL PIDG
1	52.8231.0008	1	EA	TERMINAL, SPADE, #6 RED, 22-16 AWG INSERT
2	73.3516.0504	1.08	FT	WIRE, 16 AWG 300V 105 DEG C PVC <GRN-YEL> UL1569

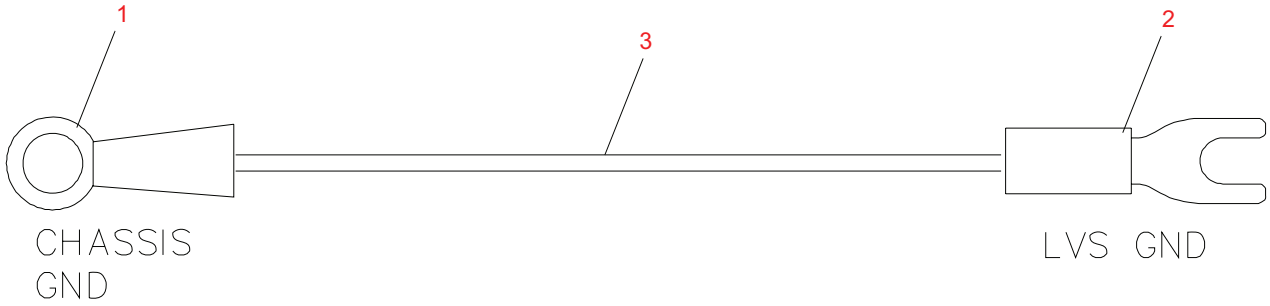
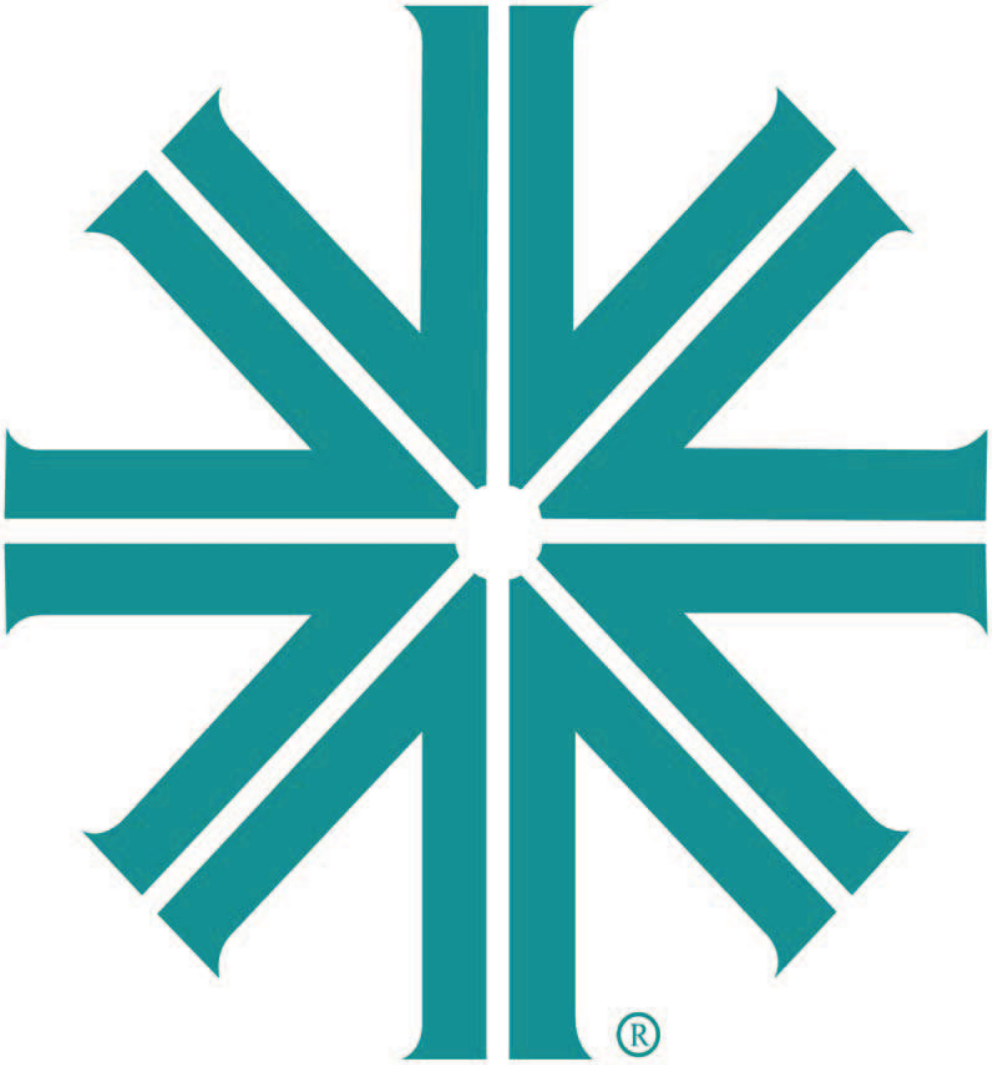


Figure 3-93: LVS Chassis Ground Cable Assembly

Notes



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